

Exhibit B

25 January 2016



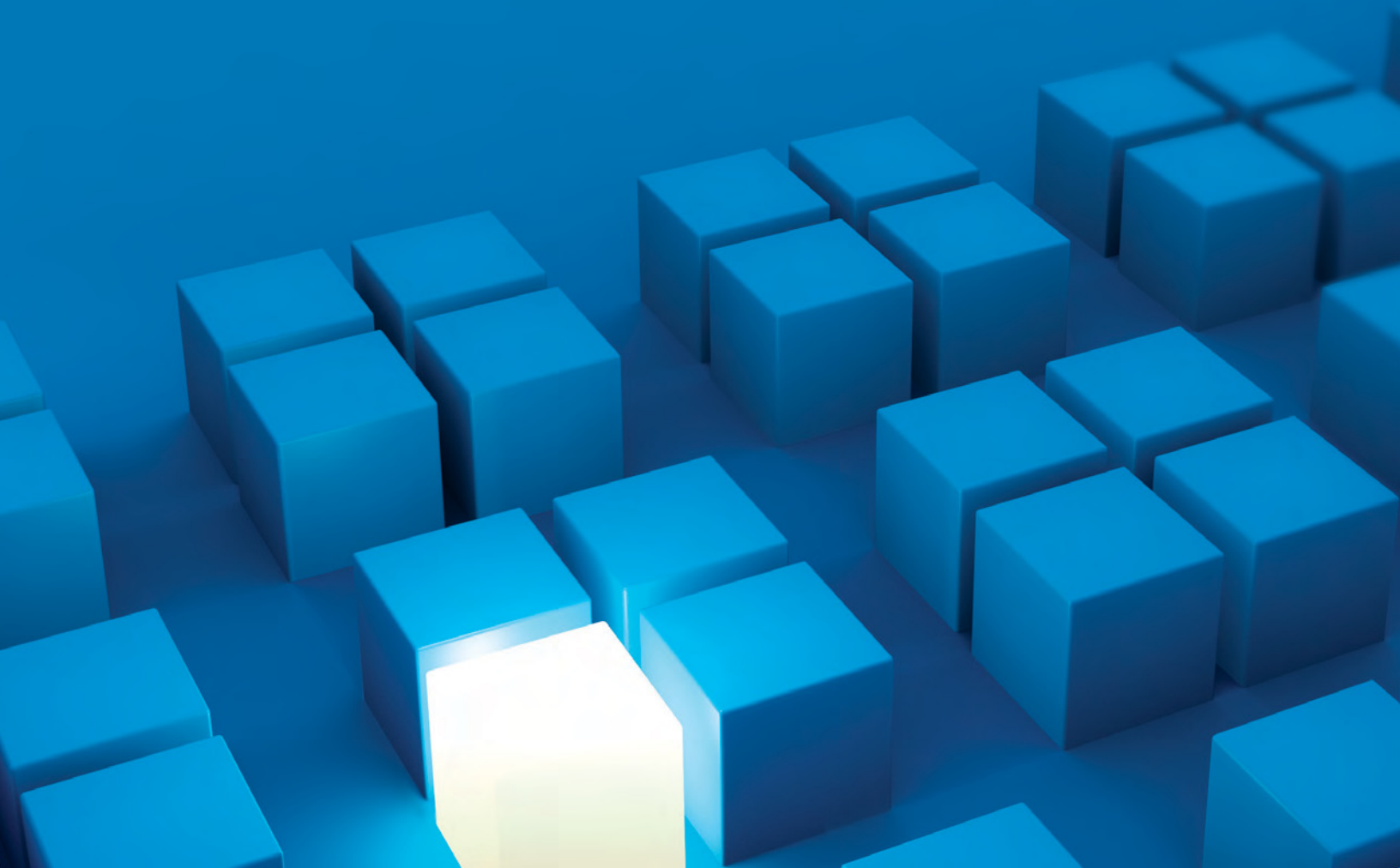
Recent Trends in Securities Class Action Litigation: 2015 Full-Year Review

Record Number of Cases Being Filed Faster than Ever
with the Shortest Alleged Class Periods

By Svetlana Starykh and Stefan Boettrich

"I am pleased to share NERA's *Recent Trends in Securities Class Action Litigation: 2015 Full-Year Review* with you. This edition builds on our work over numerous years by many of the members of NERA's Securities and Finance Practice. In this edition, we look at trends in filings and settlements and present some new findings on when cases are filed and on how the length of class periods has changed. We also provide more information on our model for predicting settlements based on updated statistical analyses of hundreds of securities class actions. While space does not permit us to show all of the analyses that the authors have undertaken in preparation for this edition, we hope that you will contact us if you want to learn more. On behalf of NERA's Securities and Finance Practice, I thank you for taking the time to review our work and hope that you find it informative."

Dr. David Tabak, *Senior Vice President*



Recent Trends in Securities Class Action Litigation: 2015 Full-Year Review

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Introduction and Summary²

2015 saw federal securities class action filings reach levels not seen since 2008, with 234 complaints filed. Growth was dominated by 182 filings alleging violations of Rule 10b-5, Section 11, or Section 12, which capped three years of double-digit growth in the category. Filings were particularly concentrated in the technology sector, which accounted for more than a fifth of all filings, and in the Ninth Circuit, which easily dominated the Second Circuit and accounted for nearly a third of all filings.

Generally, alleged class periods were the shortest on record, with the median falling to merely 310 days. Despite these shorter class periods, filed cases were not necessarily smaller. In fact, using NERA's proxy for aggregate case size, total potential case size increased by more than 25% in 2015, from \$145 billion in 2014 to \$183 billion in 2015, due to the filing of three very large cases.

Cases were also filed more quickly in 2015 than in prior years. In 2015 the median time between the end of the alleged class period and filing date shortened to a record 11 days, down almost 40% since 2014.

Although 108 cases settled in 2015, more than in any year since 2011, when 128 settled, cases continue to resolve at rates that are low by historical standards. Median settlement values were little changed from last year, staying at approximately \$7 million, but 14 settlements for more than \$100 million drove one measure of 2015 average settlement values to \$52 million, close to the all-time high of \$54 million set in 2013. The number of voluntary dismissals for cases filed and dismissed within the same calendar year more than tripled from four in 2014 to 13 in 2015.

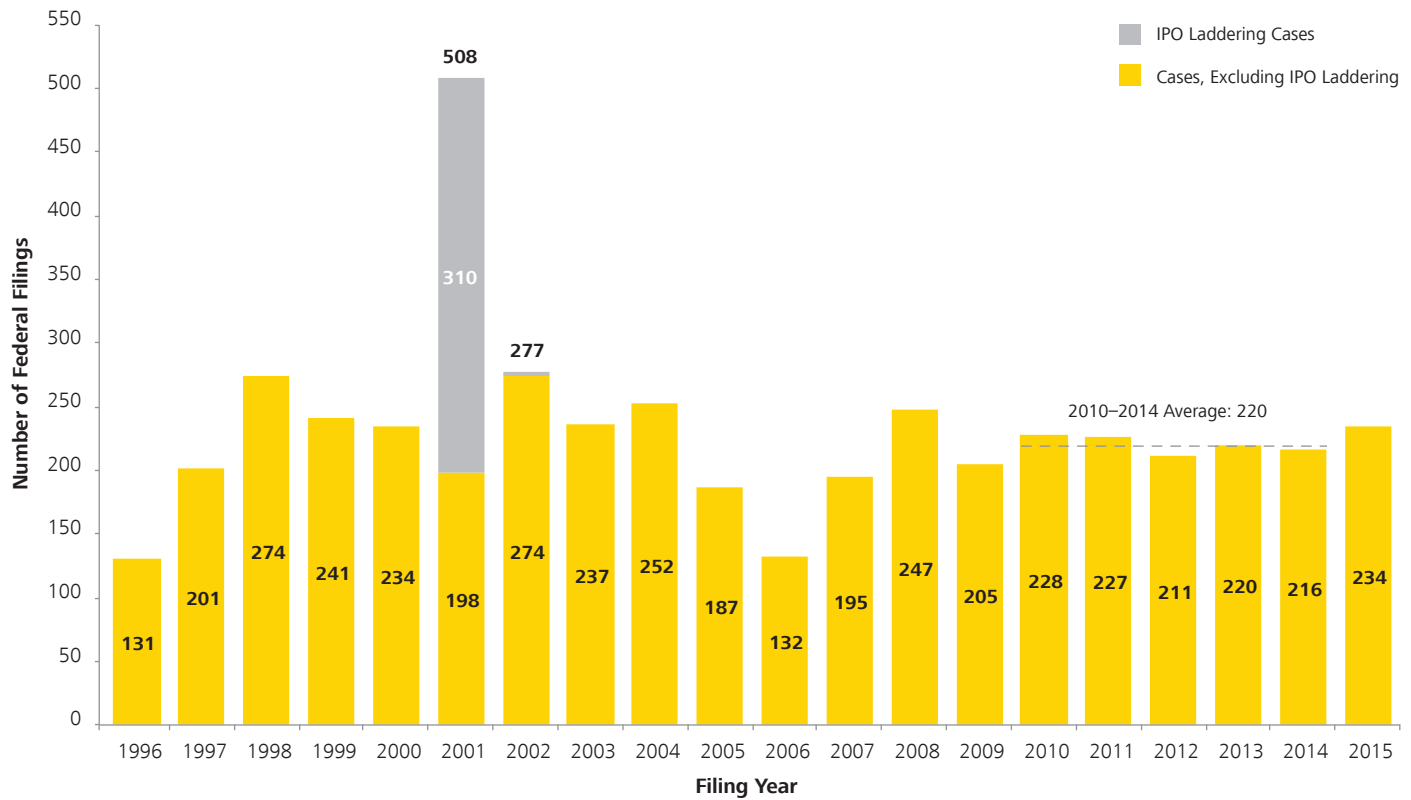
Trends in Filings

Number of Cases Filed

In 2015, 234 securities class actions were filed in federal courts, more than in any year since 2008, at the height of the financial crisis. See Figure 1. The number of filings in 2015 is 8% higher than in 2014, and about 6% higher than the average rate of the preceding five years.

The 2015 rate is well above the post-Private Securities Litigation Reform Act (PSLRA) average of approximately 216 cases per year.

Figure 1. **Federal Filings**
January 1996–December 2015

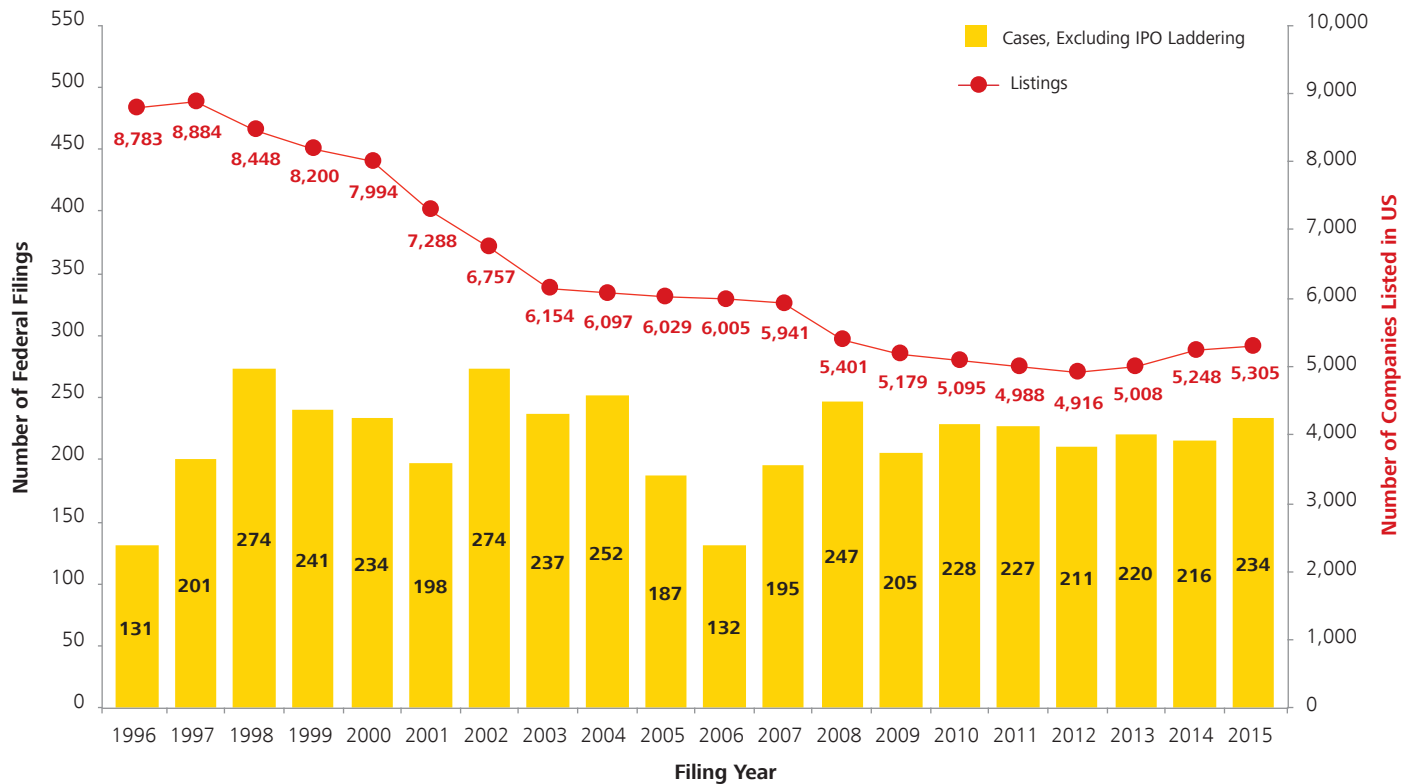


As of October 2015, 5,305 companies were listed on the major US securities exchanges. See Figure 2. The 234 federal securities class action suits filed in 2015 represent approximately 4.4% of publicly traded companies.

Over the two decades since the PSLRA went into effect, the number of companies listed on the major US exchanges has fallen by approximately 40%, from 8,783 to 5,305.³ Despite this large drop in listed companies, the average number of filings of securities class actions over the preceding five years, of about 220 per year, is higher than the average number of filings over the first five years after the PSLRA went into effect, of about 216 per year.

Given that more securities class actions have been filed against fewer listed companies, the average rate of securities litigation has increased. Over the first five years after the PSLRA went into effect, the average rate of litigation (the number of filings as a percent of listed companies) was approximately 2.6%, in contrast with the most recent five-year average rate of about 4.4%. On a yearly basis, the rate peaked in 2008 at nearly 4.6%. The modest decline to 4.4% in 2015 can be traced to a drop in filings and listings.

Figure 2. **Federal Filings and Number of Companies Listed in US**
January 1996–December 2015



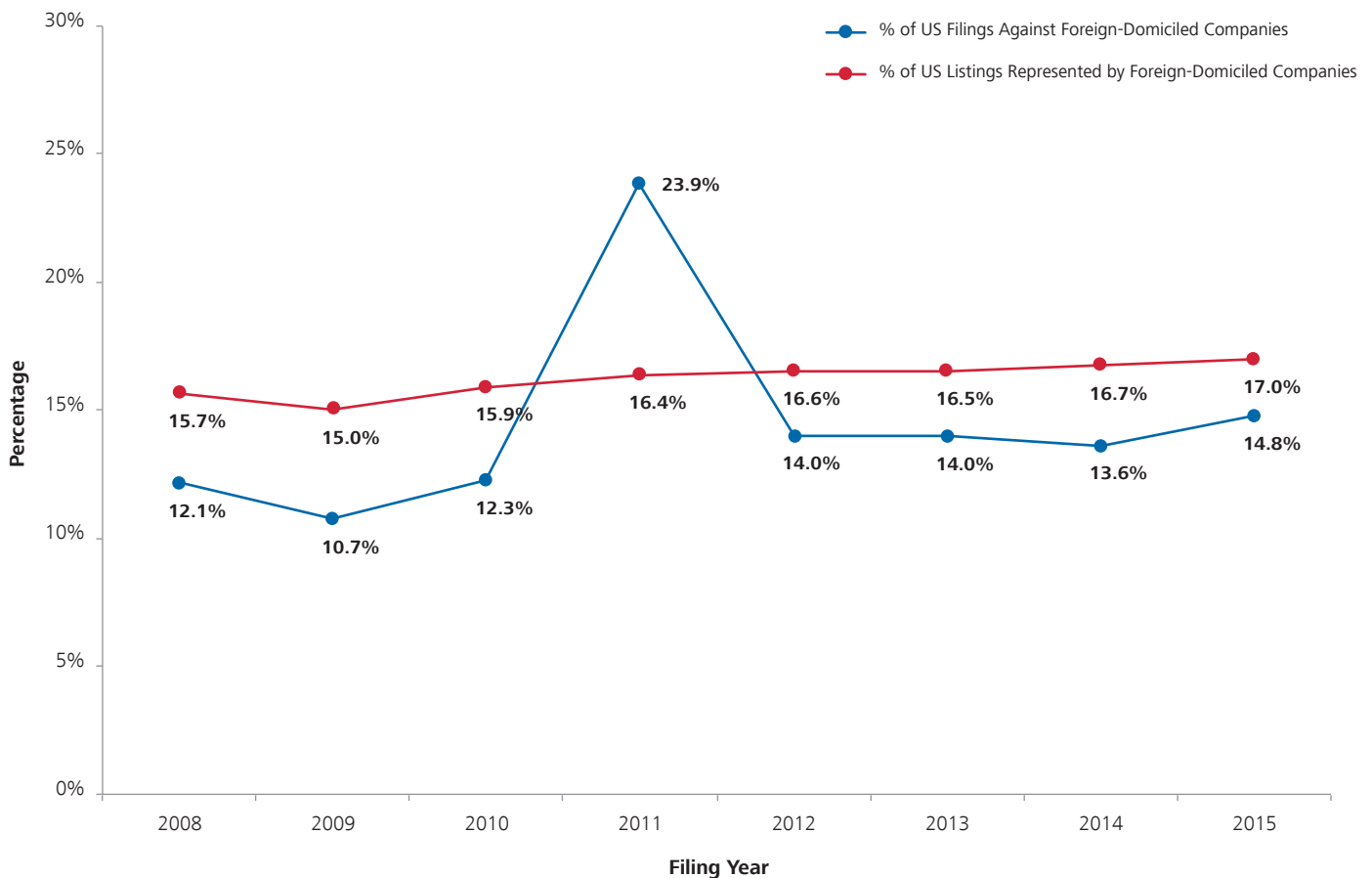
Note: Number of companies listed in US is from Meridian Securities Markets; 1996–2014 values are year-end; 2015 is as of October.

Filings by Issuers' Country of Domicile

In 2011, a record 23.9% of cases were filed against foreign issuers, considerably higher than the 16.4% of foreign issuers listed. See Figure 3. The increase was mostly due to a surge in filings against companies domiciled or with principal executive offices in China. 2011 was the only recent period in which foreign-domiciled companies were disproportionately targeted by securities class actions; in other years, the proportion of foreign class actions was less than the proportion of foreign listings.

The percent of filings against foreign issuers declined from 2011 to 2012 but has remained elevated above prior levels. In 2015, compared to 2014, the percent of filings against foreign issuers grew by nearly a percentage point more than the percent of foreign listings on US stock exchanges.

Figure 3. **Foreign-Domiciled Companies: Share of Filings and Share of All Companies Listed in US**
January 2008–December 2015



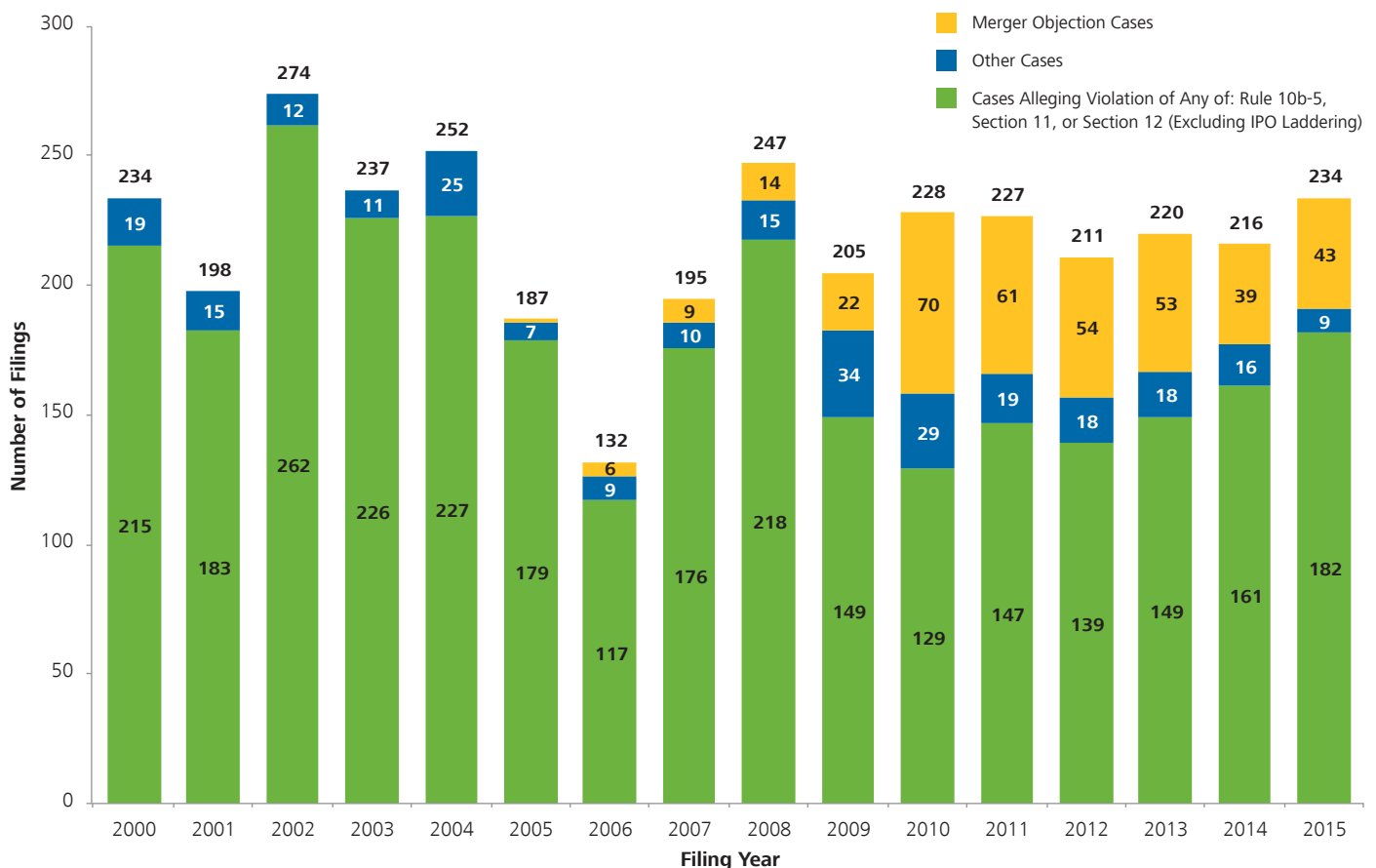
Filings by Type

Preceding the uptick in federal filings this year, the number of annual filings had been remarkably stable given the amount of variation in the types of cases filed. While the number of filings alleging violations of Rule 10b-5, Section 11, and/or Section 12—often regarded as “standard” securities class actions—fell in 2010 and 2012 to near all-time lows, filings of merger objection cases and other cases made up the difference. See Figure 4. Since then, the number of standard case filings has risen in each of the past three years. In 2015, standard case filings increased by 21 to 182, the annual largest jump since the 2008 financial crisis and a 41% increase over the 2010 low. Despite recent growth, the number of standard cases filed in 2015 remains lower than any year between 2000 and 2004.

Although federal merger objection cases were not a new case type, such cases came into focus in 2010, with 70 cases filed, or about 31% of all securities class actions that year.⁴ Since then, the number of merger objections filed at the federal level has generally fallen: only 43 filings were submitted in 2015, accounting for about 18% of all filings. This is in spite of a record volume of announced US mergers and acquisitions in 2015, which exceeded \$2 trillion for the first time ever.⁵

Rounding out the total in 2015 are a variety of other cases, primarily alleging breach of fiduciary duty for a variety of reasons.

Figure 4. **Federal Filings by Type**
January 2000–December 2015

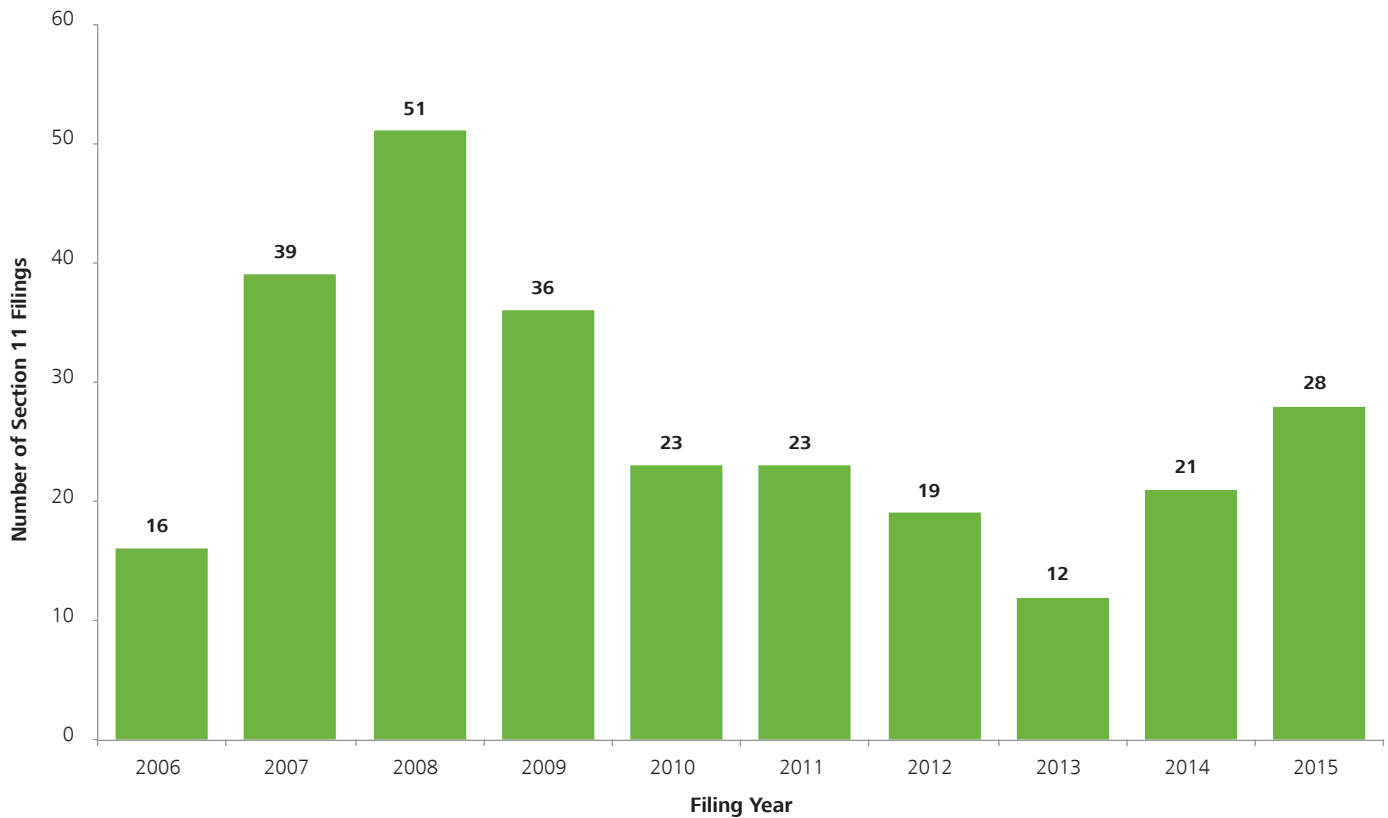


Note: Before 2005, merger objections (if any) were not disaggregated. This figure omits IPO laddering cases.

Section 11 Filings

In 2015 there were 28 filings alleging violations of Section 11, a one-third increase over 2014 and more than double the number over the past two years, as shown in Figure 5. These Section 11 filings were concentrated in two circuits. In the Ninth Circuit, filings grew from two to 10 over the last year and spanned many economic sectors. The Second Circuit also accepted 10 filings, roughly equal to 11 last year. The increase in filings alleging violations of Section 11 follows what, according to the *Financial Times*, was a “bumper IPO year” in 2014.⁶ According to Mergerstat data, 289 IPOs were conducted in 2014, more than in any year since 2000.⁷

Figure 5. **Section 11 Filings**
January 2006–December 2015



Aggregate Investor Losses

In addition to the number of cases filed, we also consider the total potential size of these cases using a metric we label “investor losses.”

NERA’s investor losses variable is a proxy for the aggregate amount that investors lost from buying the defendant’s stock rather than investing in the broader market during the alleged class period. Note that the investor losses variable is not a measure of damages, because any stock that underperforms the S&P 500 would have “investor losses” over the period of underperformance; rather, it is a rough proxy for the relative size of investors’ potential claims. Historically, “investor losses” have been a powerful predictor of settlement size. Investor losses can explain more than half of the variance in the settlement values in our database.

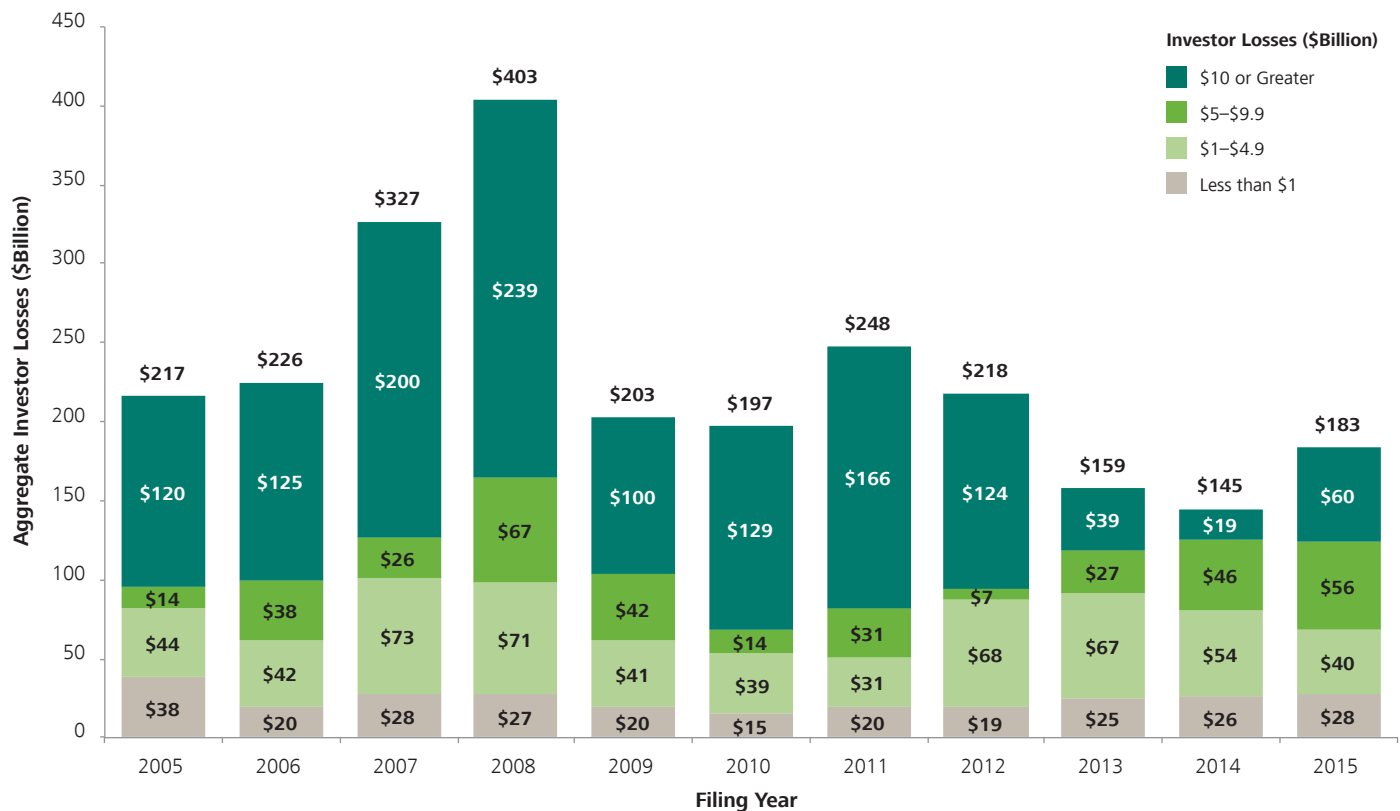
We do not compute investor losses for all cases included in this publication. For instance, class actions in which only bonds and not common stock are alleged to have been damaged are not included. The largest excluded groups are the IPO laddering cases and the merger objection cases. Previous NERA reports on securities class actions did not include investor losses for cases with only Section 11 allegations, but such cases are included here. The calculation for these cases is somewhat different than for cases with 10b-5 claims.

For each year since 2005, we calculate investor losses at the time of filing for each case for which they can be computed. Yearly losses are grouped by magnitude and aggregated, as shown in Figure 6.

In 2015, aggregate investor losses on all filed cases totaled \$183 billion, a decrease of more than 25% from four years ago, but a marked increase of more than 25% over 2014 and 15% over 2013. 2013 and 2014 had the lowest aggregate investor losses over the past decade, primarily due to a dearth of large cases being filed. Historically, a few cases with very large investor losses (over \$10 billion, and shown in dark green) have made up the largest component of total investor losses each year. In fact, for most years before 2012, cases with such high investor losses accounted for most of the total losses for the year. However, the pattern changed in 2013 and 2014, when cases in the lower investor loss categories made up the bulk of the total investor losses for the year.

In 2015, however, the pattern changed, and three cases with investor losses of over \$10 billion were filed, the two largest being against Canadian issuers. A filing against Valeant Pharmaceuticals International accounted for 17% of the investor losses (and half of losses in the high investor loss category). Large filings against Silver Wheaton Corp. and Clovis Oncology, Inc. accounted for 9% and 7% of aggregate investor losses, respectively.

Figure 6. **Aggregate Investor Losses (\$Billion)—Shareholder Class Actions with Alleged Violations of Rule 10b-5 or Section 11**
January 2005–December 2015



Filings by Circuit

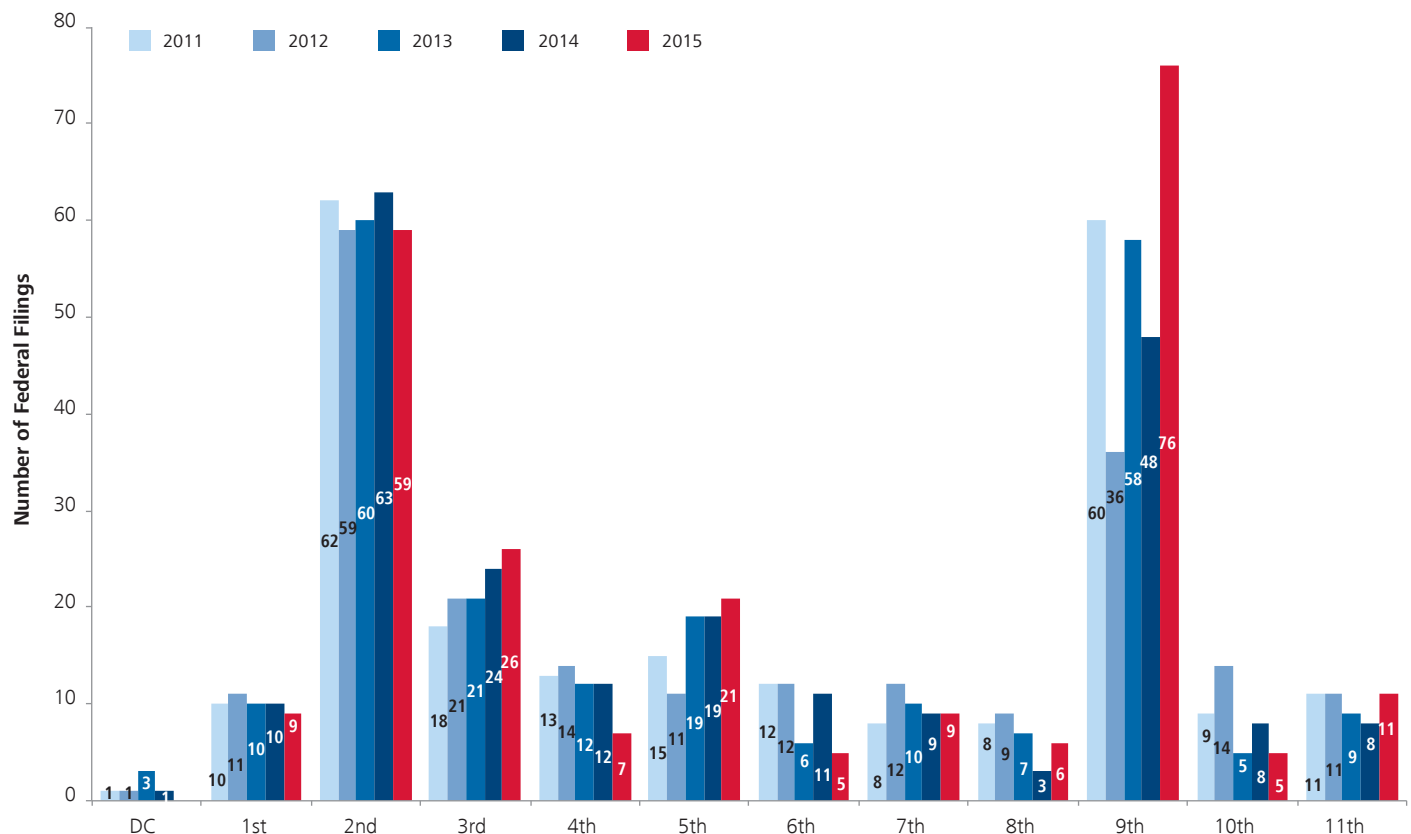
Filings continued to be concentrated in the Second and Ninth Circuits, where more cases were filed than all other circuits combined. See Figure 7.

Filings in the Ninth Circuit, which includes California, grew more than 58% to 76 filings, up from 48 last year. Of these, 65 alleged violations of Rule 10b-5, Section 11, and/or Section 12, an increase of 66% from 2014. More than 30% of the growth came from filings of cases alleging violations of Section 11, having increased from two in 2014 to 10 in 2015, a five-year high.

Filings in the Second Circuit have been relatively steady over the past five years. Although filings matched a five-year low of 59 in 2015, the maximum over this period is only about 7% higher at 63. Notably, fewer securities class actions were filed in the Second Circuit than in the Ninth Circuit for the first time in five years.

Recent steady growth in filings in the Third and Fifth Circuits continued in 2015. Third Circuit filings reached 26, up from 18 in 2011. Growth in filings alleging a violation of Rule 10b-5, Section 11, and/or Section 12 ("standard cases") dominated, increasing to 20 in 2015 from six in 2011. In the Fifth Circuit, 21 securities class actions were filed, of which about 60% were standard cases and about 40% were federal merger objection cases. The Fifth Circuit accepted a disproportionate number of merger objection cases in 2015: while only about 9% of securities class actions were filed in that circuit, more than 20% of merger objection cases were filed in the Fifth Circuit.

Figure 7. **Federal Filings by Circuit and Year**
January 2011–December 2015

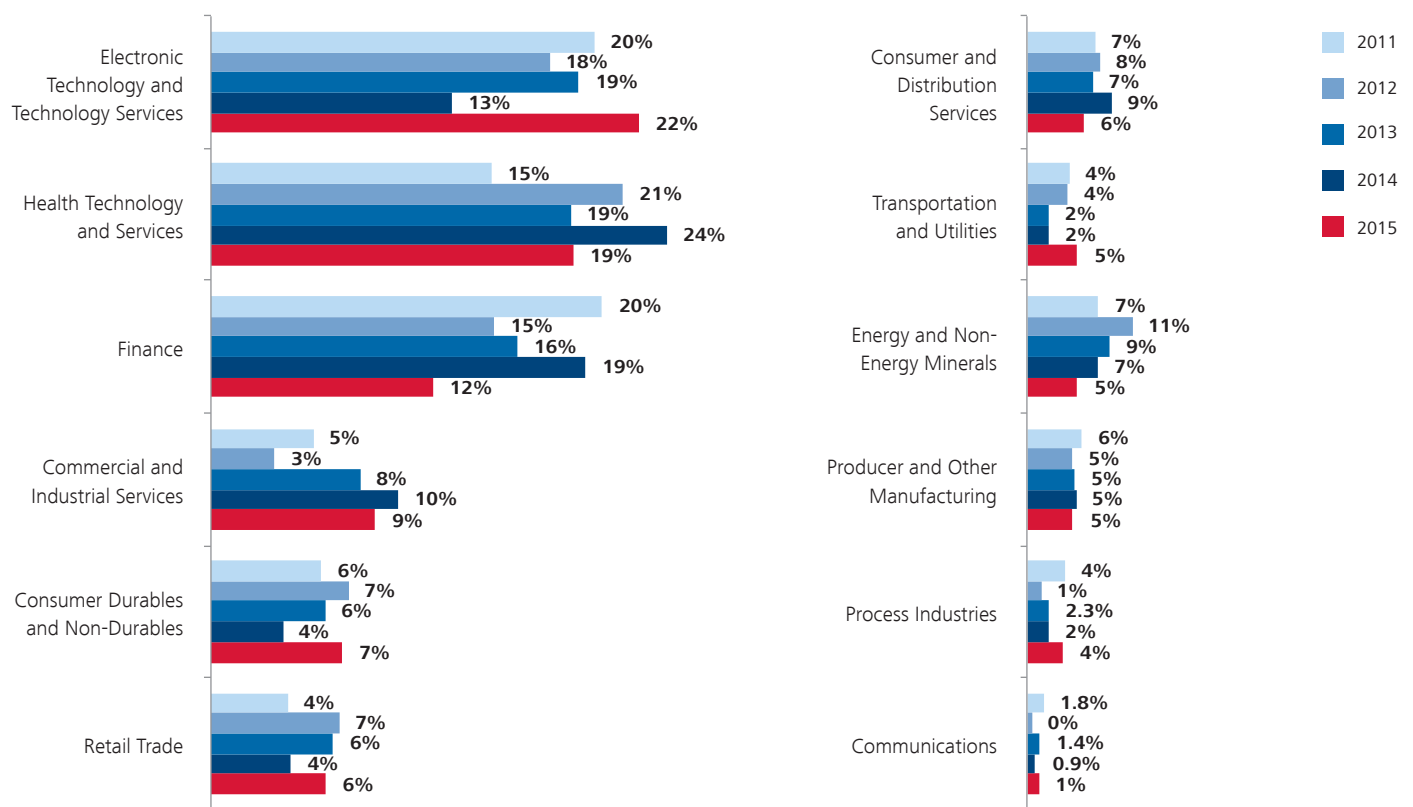


Filings by Sector

More than one out of every five securities class action cases filed in 2015 was against a firm in the Electronic Technology and Technology Services sector. See Figure 8. Filings in the sector eclipsed those in any other, and reached a five-year high in percentage terms. Filings in the sector totaled 52 in 2015, more than a 90% increase from 27 in 2014. Of these, filings alleging violations of Rule 10b-5 grew by nearly 61%, from 23 to 37.

There was a considerable drop in the percent of filings with claims against firms in the Finance sector, which fell to 12% in 2015, down from nearly 20% in 2011. In 2015, there were 27 filings with claims against Finance sector firms, down from 42 in 2014.

Figure 8. **Percentage of Filings by Sector and Year**
January 2011–December 2015

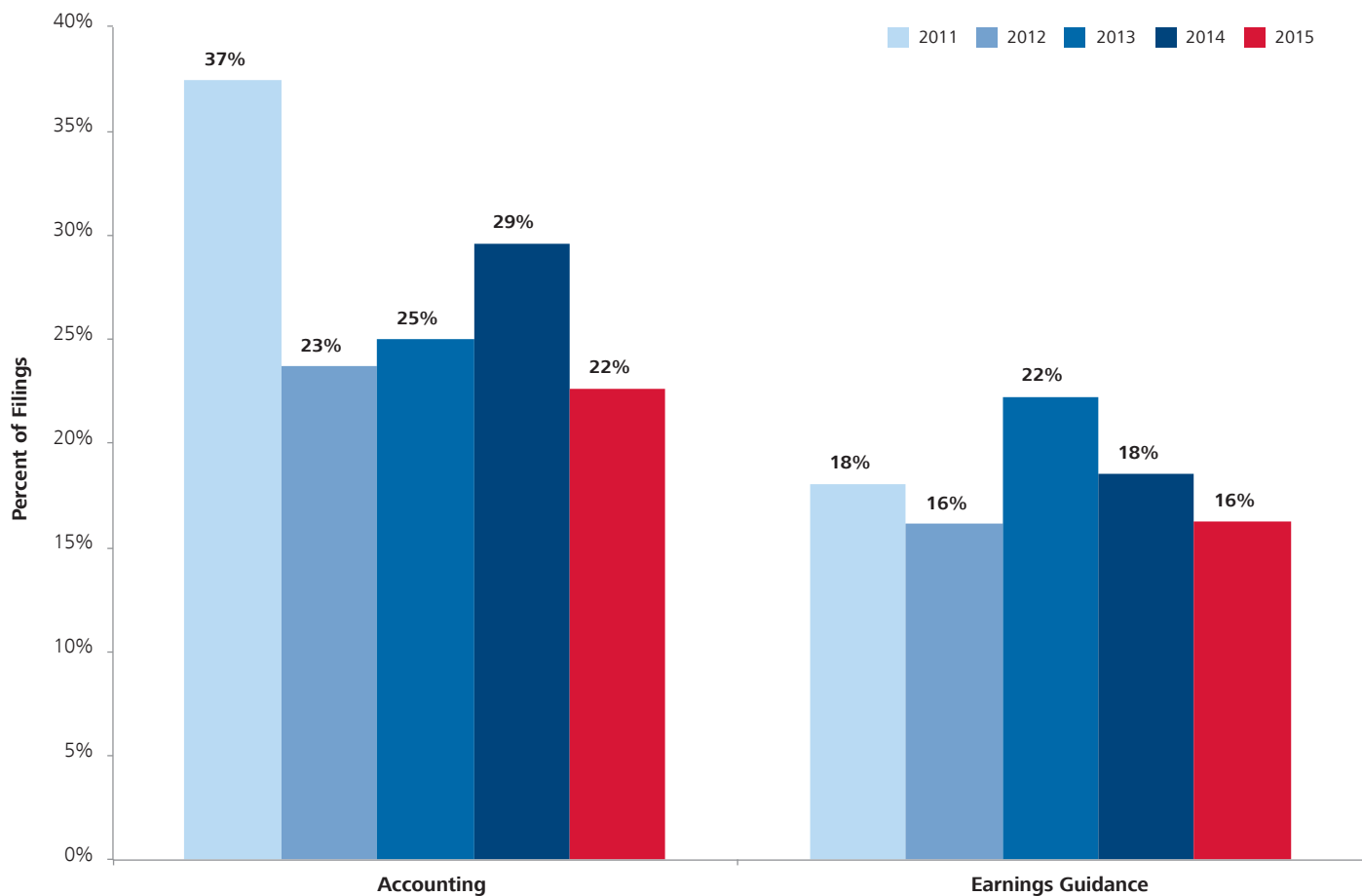


Note: This analysis is based on the FactSet Research Systems, Inc. economic sector classification. Some of the FactSet economic sectors are combined for presentation.

Allegations

In 2015, about 22% of filings contained accounting allegations, down from about 29% last year and from 37% in 2011. See Figure 9. The decline in accounting allegations is correlated with the short- and long-term reduction in cases with accounting co-defendants. The percent of filings alleging misleading earnings guidance continued to decrease to about 16% of filings in 2015. Most complaints include a wide variety of allegations, not all of which are depicted here. Due to multiple types of allegations in complaints, the same case may be included in both the accounting and missed-guidance allegation categories.

Figure 9. **Allegations Related to Accounting and Earnings Guidance**
January 2011–December 2015



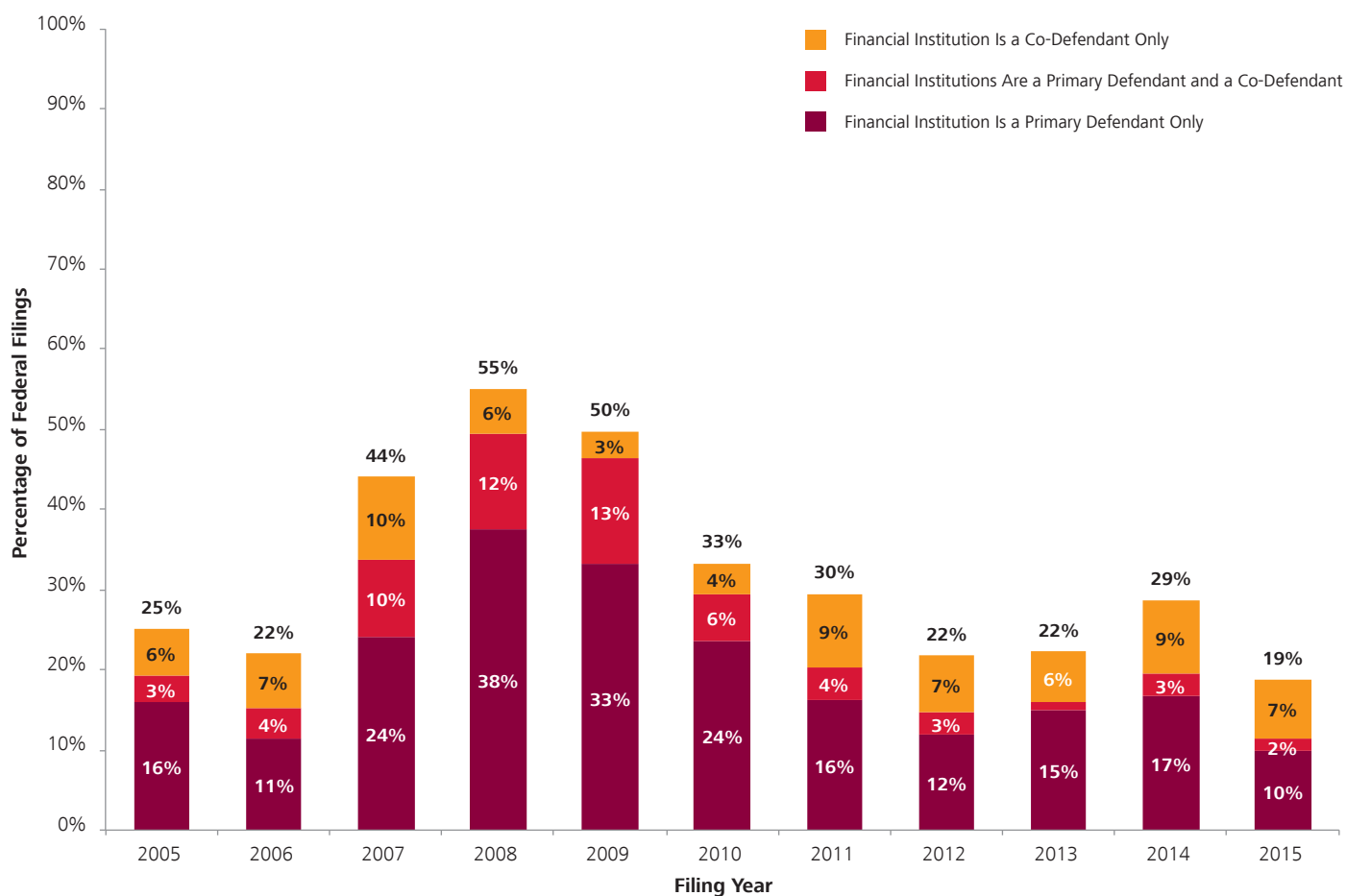
Defendants in the Financial Sector

In addition to being targeted as primary defendants, companies in the Financial sector are often also targeted as co-defendants.

In 2015, 19% of securities class actions filed had a defendant in the Financial sector (whether a primary defendant or co-defendant). See Figure 10. This is down sharply from 29% last year, and is mainly due to about an eight percentage point reduction in filings where the primary defendant is in the Financial sector, as also illustrated in Figure 8. This represents a continuation of the longer term decline in the percentage of filings with primary Financial sector defendants since the financial crisis when, in 2008, about 50% of securities class actions primarily targeted financial institutions.

The overall reduction also stemmed from a two percentage point drop in filings where financial institutions were only co-defendants (such as an underwriter co-defendant). Over the past decade, financial institutions were generally co-defendants in between 3% and 9% of filings where the primary defendant is not a financial institution. In 2015, this percentage was about 7%.

Figure 10. **Federal Cases in which Financial Institutions Are Named Defendants**
January 2005–December 2015



Accounting Co-Defendants

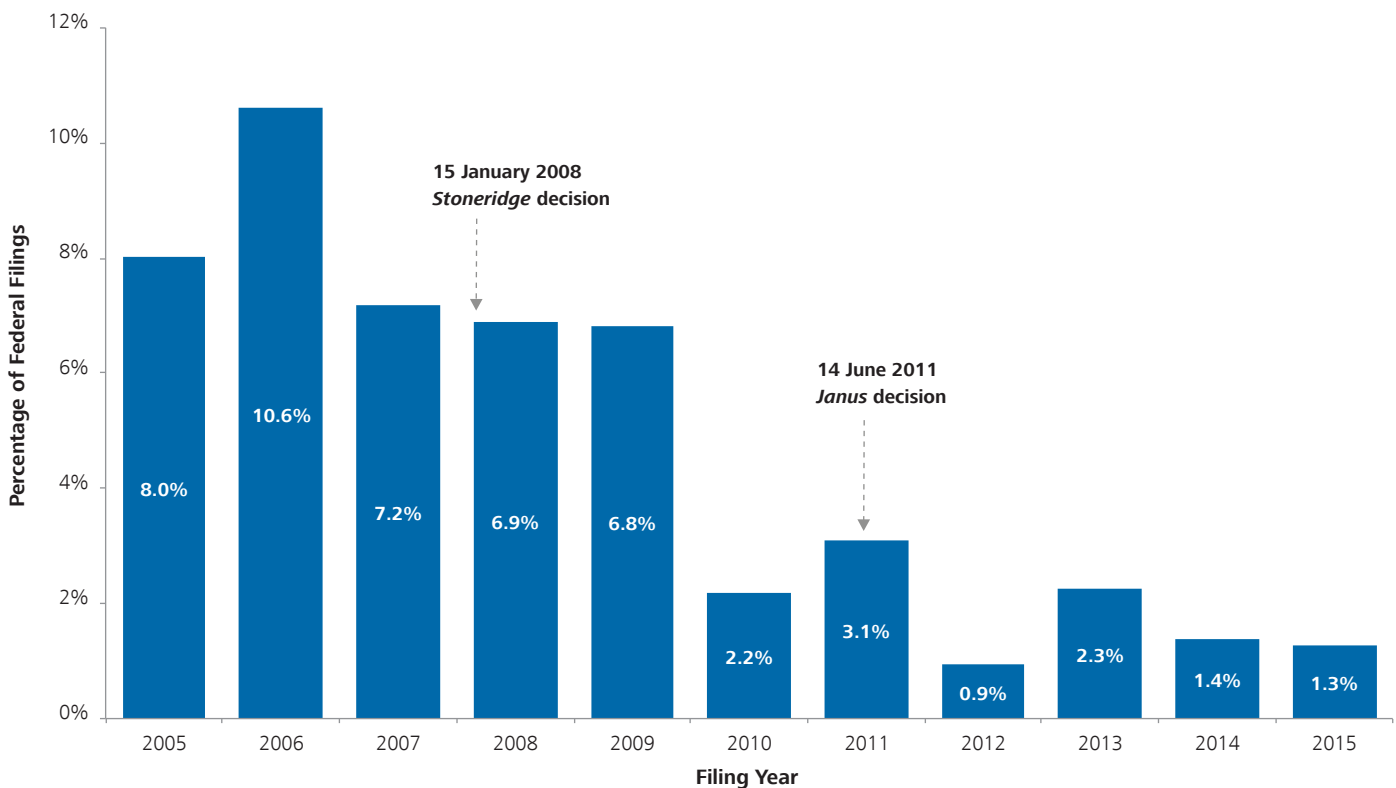
Only three securities class actions had an accounting firm as a co-defendant in 2015, one of which was a Big Four accounting firm.

The trend toward a decline in the percent of securities class actions with accounting firm co-defendants continued in 2015. This trend is likely the result of two factors: (1) fewer cases have been filed that include accounting allegations, and (2) changes in the legal environment relating to accounting co-defendants.

First, since 2011, the percent of filings with accounting claims dropped from about 37% to about 22%, while the percent of cases with an accounting co-defendant dropped from 3% to a little more than 1%. See Figure 11.⁸

The drop in the relative percent of filings with an accounting co-defendant, however, exceeded the decline of filings with accounting allegations, potentially due to changes in the legal environment, the second factor noted above. The legal environment was impacted by two Supreme Court rulings over the period. The Supreme Court's *Janus* decision in 2011 restricted the ability of plaintiffs to sue parties not directly responsible for misstatements.⁹ This decision, along with the Court's *Stoneridge* decision in 2008, which limited scheme liability, may have made accounting firms less appealing targets for securities class action litigation.¹⁰

Figure 11. **Percentage of Federal Filings in which an Accounting Firm Is a Co-Defendant**
January 2005–December 2015

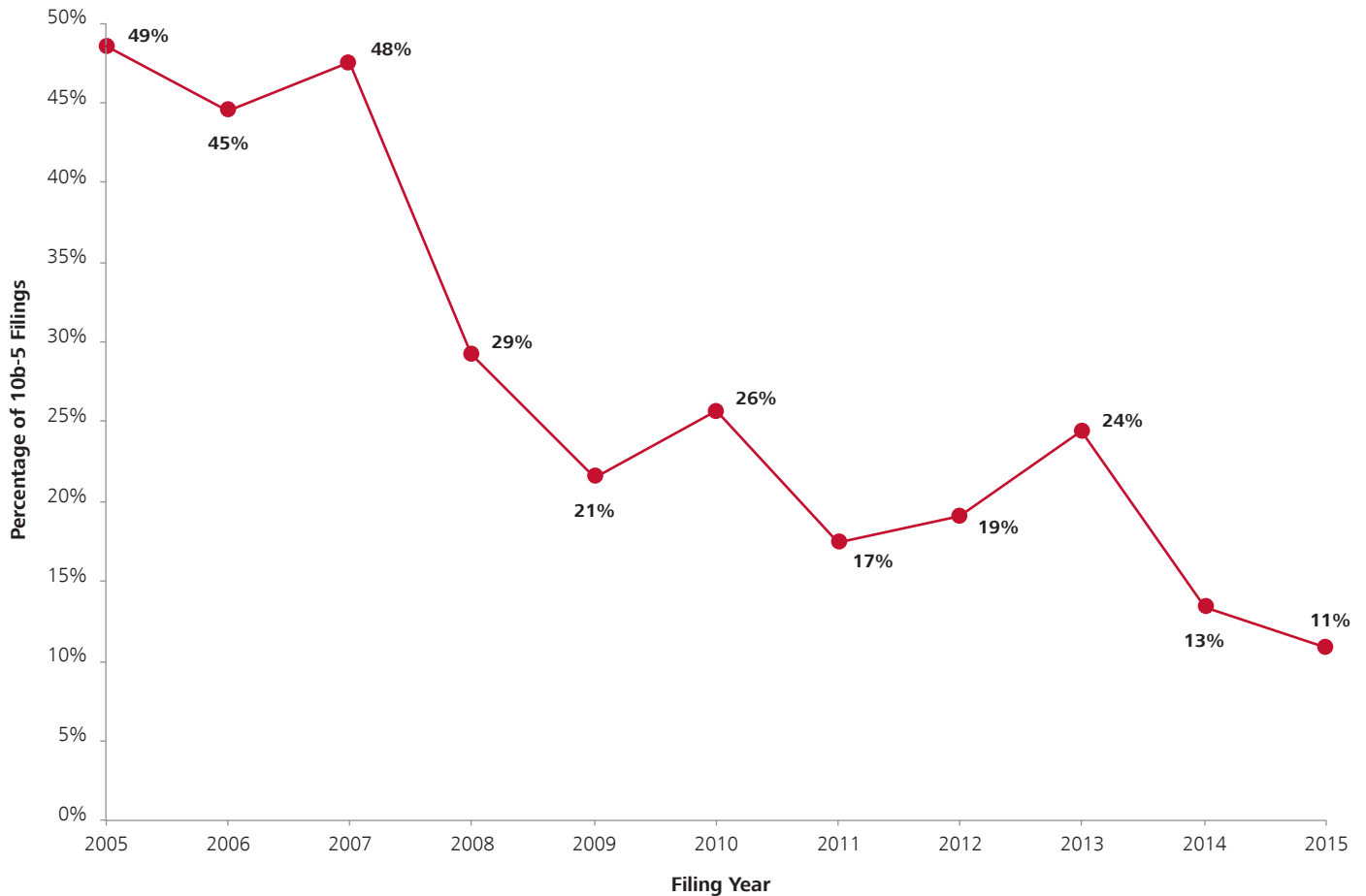


Note: Coded on the basis of the first (available) complaint.

Alleged Insider Sales

The percentage of 10b-5 class actions that also alleged insider sales continued to decrease in 2015, dropping from 49% in 2005 to 11% in 2015. See Figure 12.

Figure 12. **Percentage of Rule 10b-5 Filings Alleging Insider Sales**
By Filing Year, January 2005–December 2015

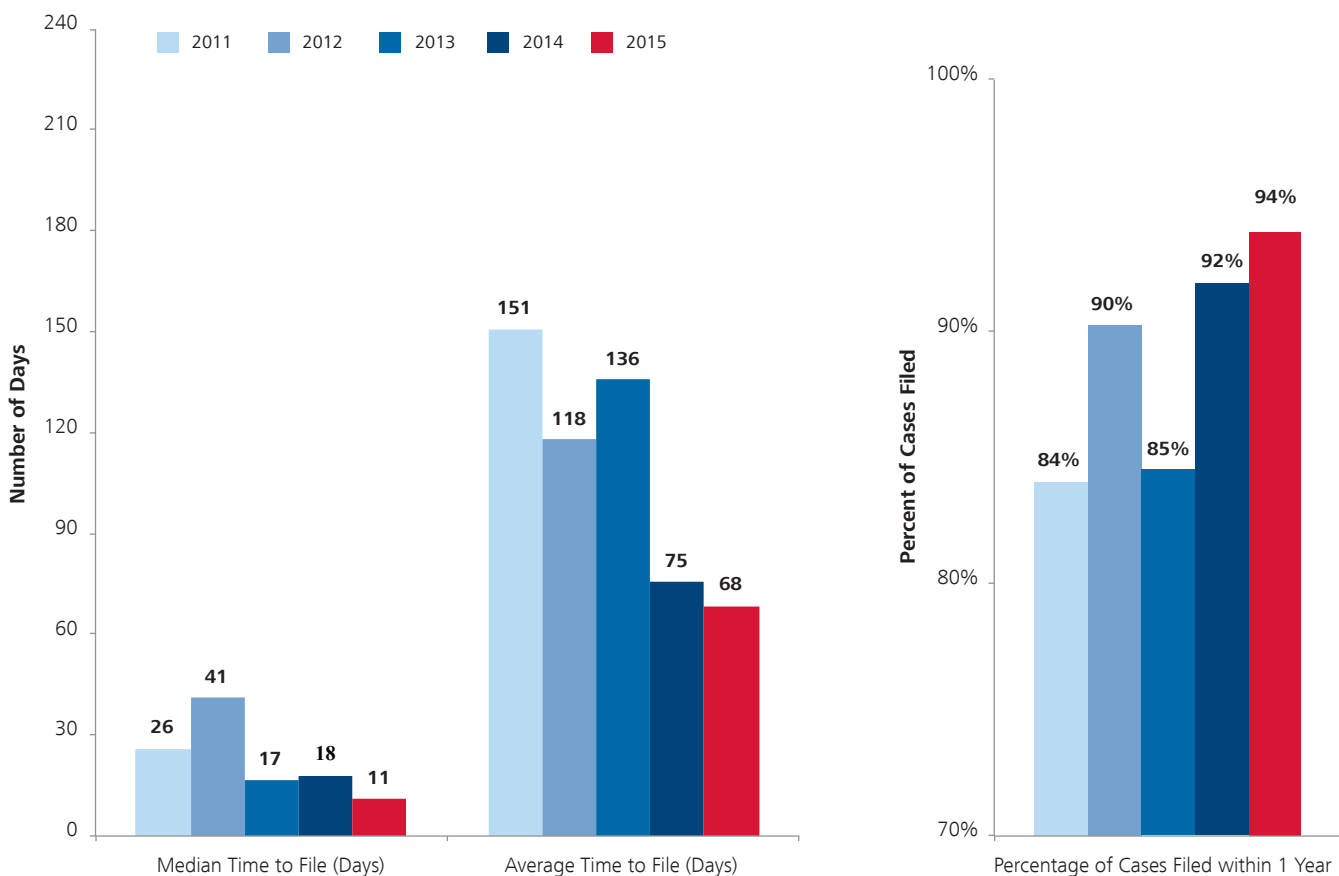


Time to File

The term “time to file” denotes the time between the end of the alleged class period and the filing date of the first complaint. Figure 13 illustrates how the median and average time to file (in days) has changed over the past five years, as well as the percent of cases in which the first complaint is filed within one year after the end of the purported class period.

All three indicators show that over the past few years, cases are generally being filed closer to the end of the alleged class periods. The 2015 median and average times to file were shorter than any other year in the past decade. In 2015, the percent of cases filed within a year of the purported class period exceeded 94%, higher than any other year in the past decade. It took only 11 days or less to file a complaint in 50% of cases in 2015. This shows a lower frequency of cases with long periods of time between when an alleged fraud was revealed and the filing of a related claim.

Figure 13. **Time to File from End of Alleged Class Period to File Date for Rule 10b-5 Cases**
January 2011–December 2015



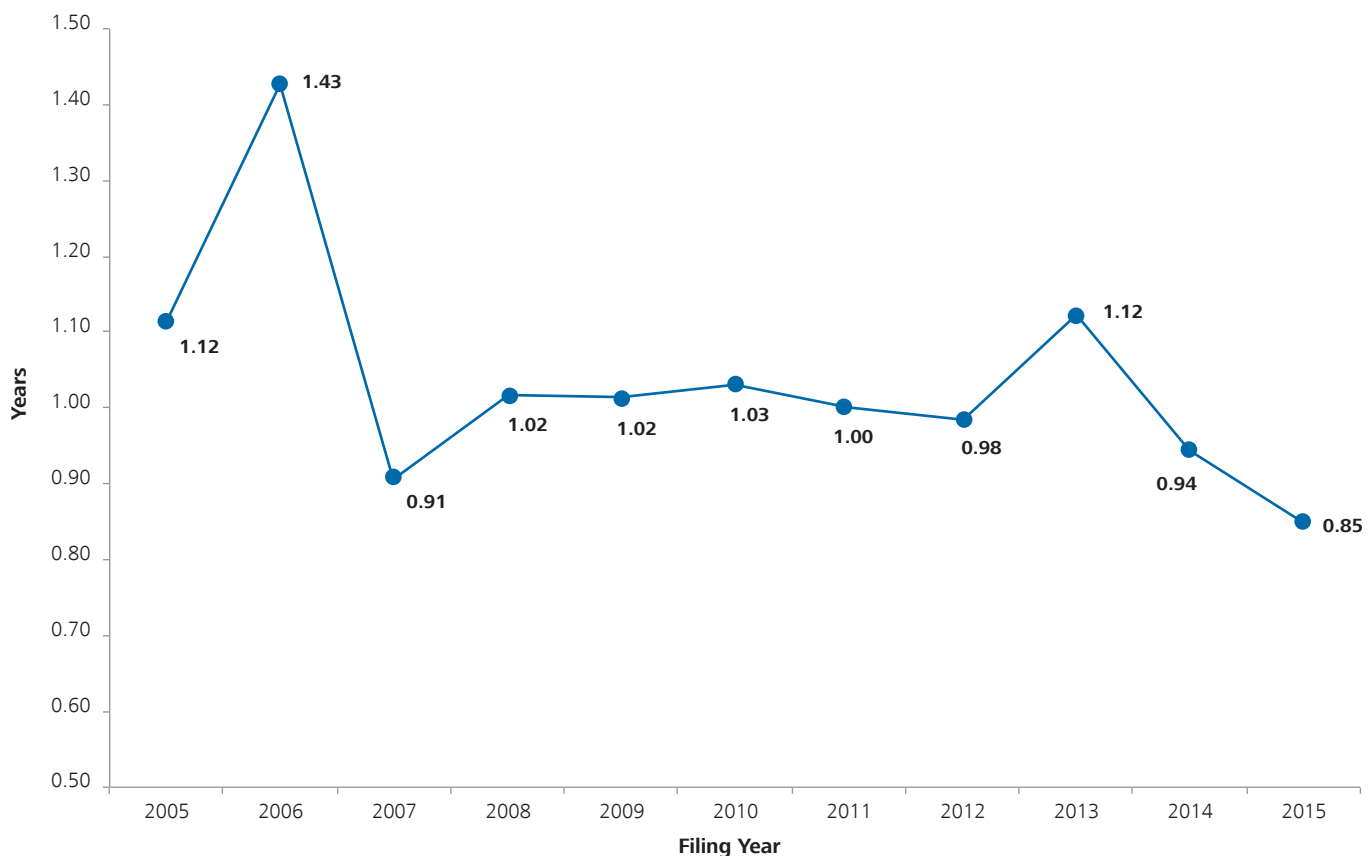
Note: This analysis excludes cases where alleged class period could not be unambiguously determined.

Class Period Length

For the second year in a row, the median class period length of filed securities class actions has fallen. See Figure 14. 2015 had the shortest median class period of any year in the past decade.

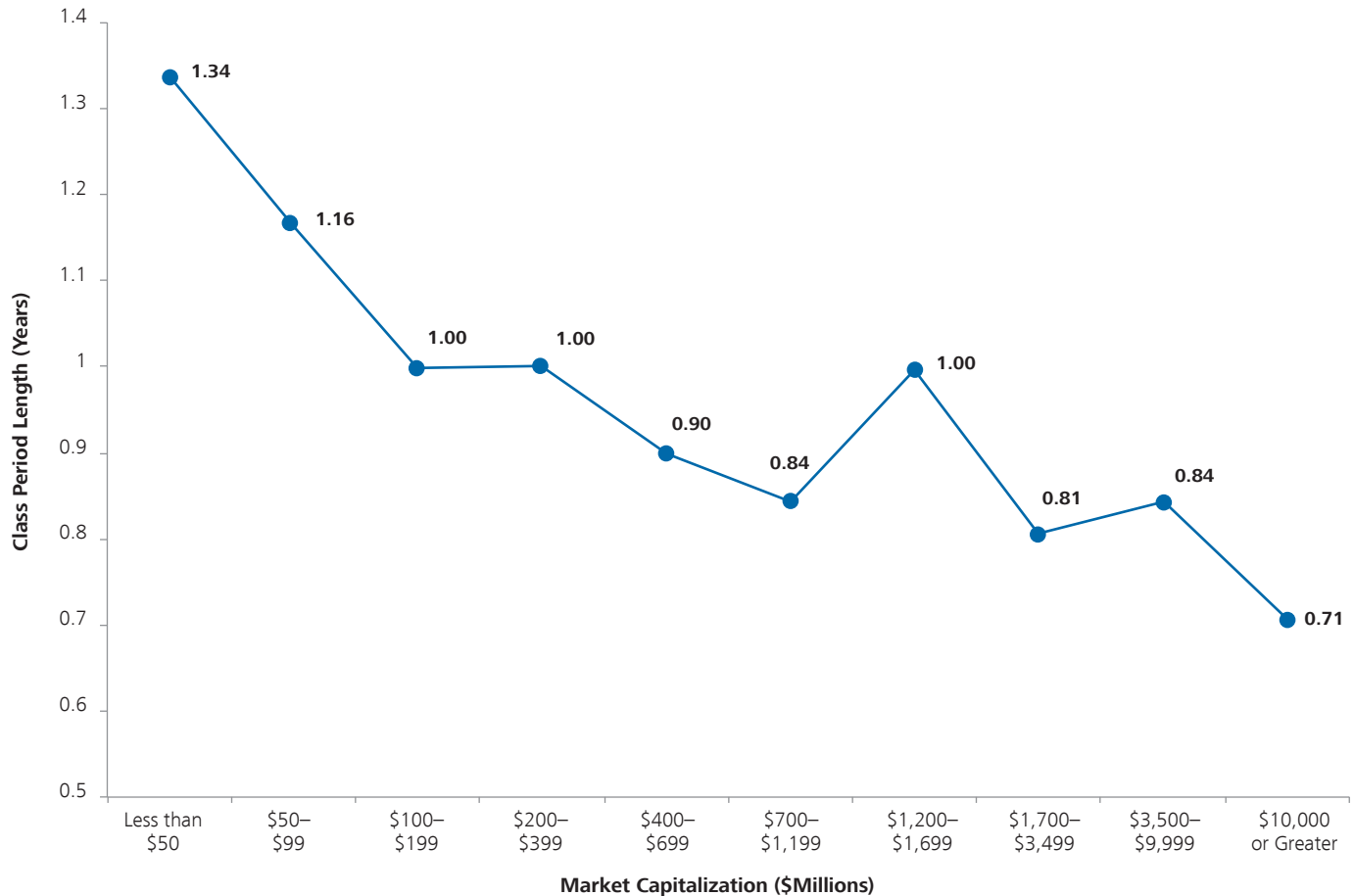
One reason class periods have been shorter may be that alleged malfeasance is being detected sooner.¹¹ One potential reason for such a trend towards earlier detection over the last couple years could be recent regulation changes, and higher issuer market capitalizations. In recent years, the SEC has enacted new regulations to combat securities fraud, including a mandate that all financial statements be filed in a machine-readable format. These filing guidelines were designed to increase transparency and facilitate more rapid detection of accounting anomalies.¹² For example, analysts can now use “data-scraping” programs to download financial data from numerous firms in a similar industry. This permits them to compare the financial figures of one company to those of its peers, enabling interested parties to more easily investigate whether an apparently unusual financial result is a reflection of something company-specific or is part of a broader industry trend. In August of 2011, the SEC also adopted rules to reward individuals who expose violations of securities laws, thus motivating whistleblowers.¹³

Figure 14. **Median Class Period Length—Excluding Merger Objection Cases, Cases Without Class Data, and Class Periods Longer than Five Years**
January 2005–December 2015



We also note that class period length tends to be negatively correlated with the market capitalization of the defendant firm. See Figure 15. While the data do not provide specific evidence on this, firm size may be a proxy for a firm's ability to catch or address potential errors more quickly, as larger firms likely have more comprehensive control systems. Between 2012 and 2015, the yearly median market capitalization of primary defendant firms was \$658 million on average, up about 45% from \$454 million between 2008 and 2011.

Figure 15. **Class Period Length vs. Issuer Market Capitalization—Excluding Merger Objection Cases, Cases Without Class Data, and Class Periods Longer than Five Years**
January 2011–December 2015



Analysis of Motions

NERA's statistical analysis has found robust relationships between settlement amounts and the litigation stage at which settlements occur. We track three types of motions: motion to dismiss, motion for class certification, and motion for summary judgment. For this analysis, we track securities class actions in which holders of common stock are part of the class and a violation of Rule 10b-5 or Section 11 is alleged.

To correctly interpret the Figures, it is important to understand that we record the status of any motion as of the resolution of the case. For example, a motion to dismiss which had been granted but was later denied on appeal is recorded as denied, if the case settles without the motion being filed again.

Outcomes of motions to dismiss and motions for class certification are discussed below.

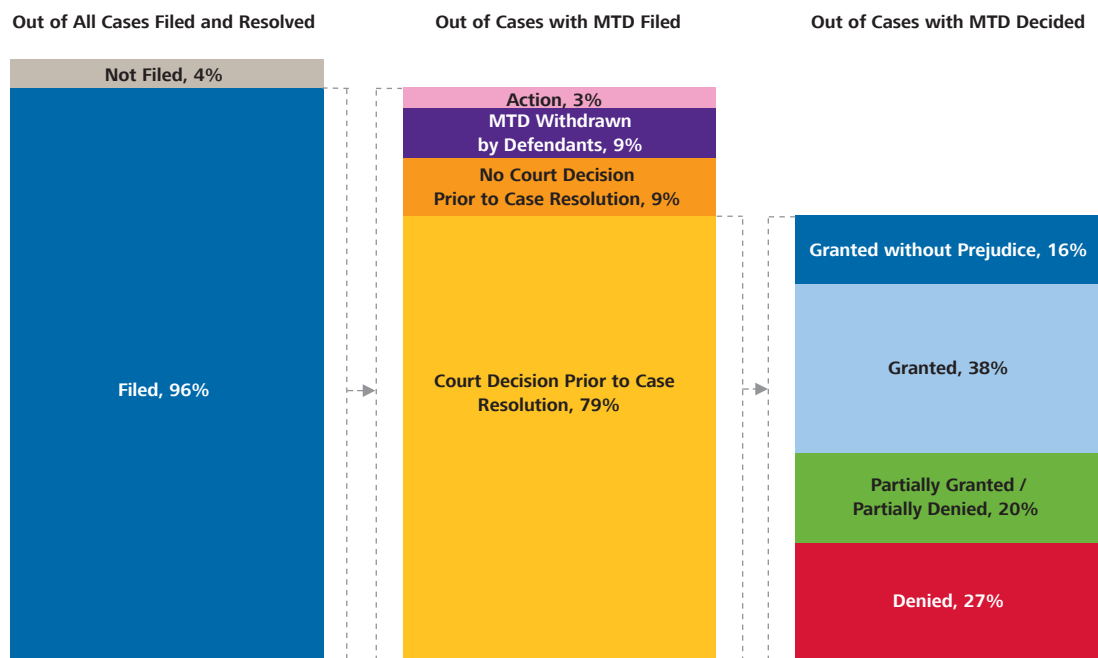
Motions for summary judgment were filed by defendants in 7.3%, and by plaintiffs in only 1.6%, of the securities class actions filed and resolved over the 2000–2015 period, among those we track. Outcomes of the motions for summary judgment are available from NERA, but not shown in this report.

Motion to Dismiss

A motion to dismiss was filed in 96% of the securities class actions tracked. However, the court reached a decision in only 79% of the motions filed. In the remaining 21% of cases in which a motion to dismiss was filed, either the case resolved before a decision was reached, plaintiffs voluntarily dismissed the action, or the motion to dismiss itself was withdrawn by defendants. See Figure 16.

Out of the motions to dismiss for which a court decision was reached, the following three outcomes classify all of the decisions: granted with or without prejudice (54%), granted in part and denied in part (20%), and denied (27%).

Figure 16. **Filing and Resolutions of Motions to Dismiss**
January 2015–December 2015



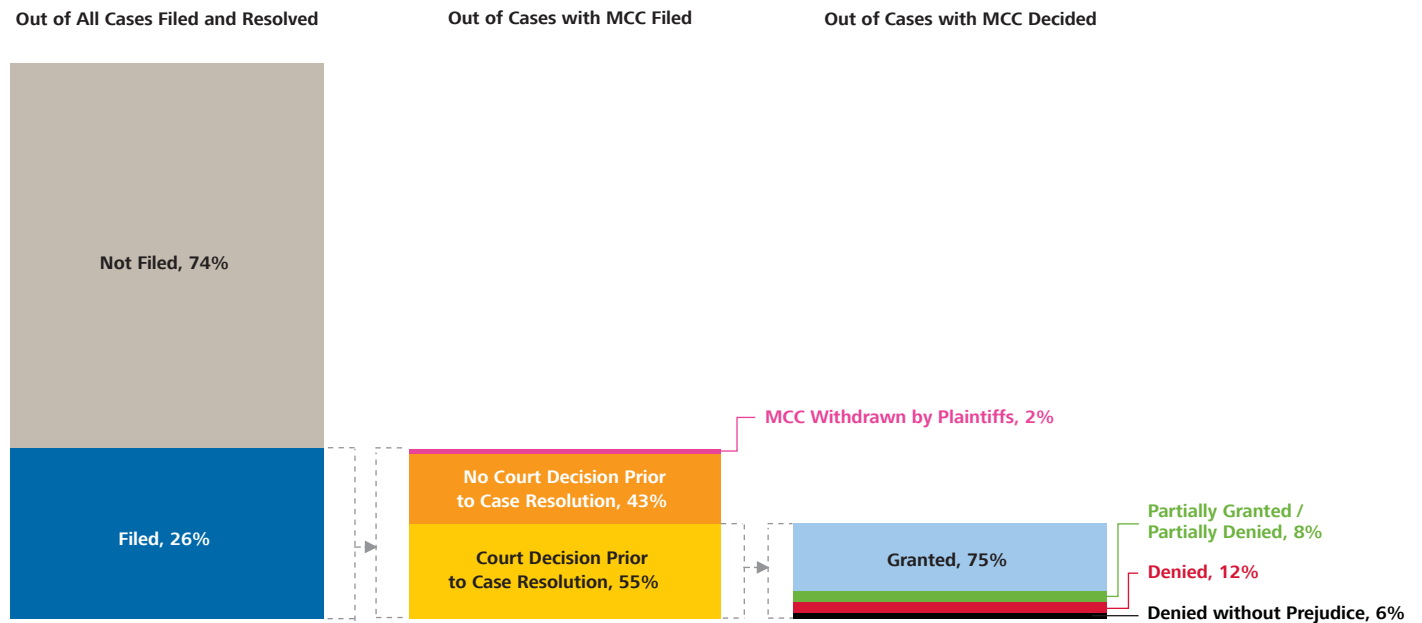
Note: Includes cases in which holders of common stock are part of the class and a 10b-5 or Section 11 violation is alleged.

Motion for Class Certification

Most cases were settled or dismissed before a motion for class certification was filed: 74% of cases fell into this category. Of the remaining 26%, the court reached a decision in only 55% of the cases where a motion for class certification was filed. So, overall, only 14% of the securities class actions filed (or 55% of the 26%) reached a decision on the motion for class certification. See Figure 17.

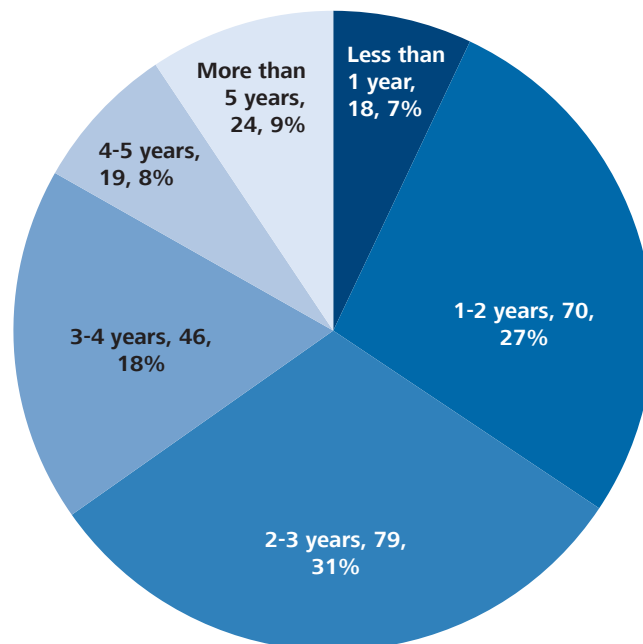
Our data show that 83% of the motions for class certification that were decided were granted in full or partially.

Figure 17. **Filing and Resolutions of Motions for Class Certification**
January 2015–December 2015



Approximately 65% of the decisions on motions for class certification that were reached were reached within three years of the original filing date of the complaint. See Figure 18. The median time is about 2.4 years.

Figure 18. **Time from First Complaint Filing to Class Certification Decision**
Cases Filed and Resolved January 2000–December 2015



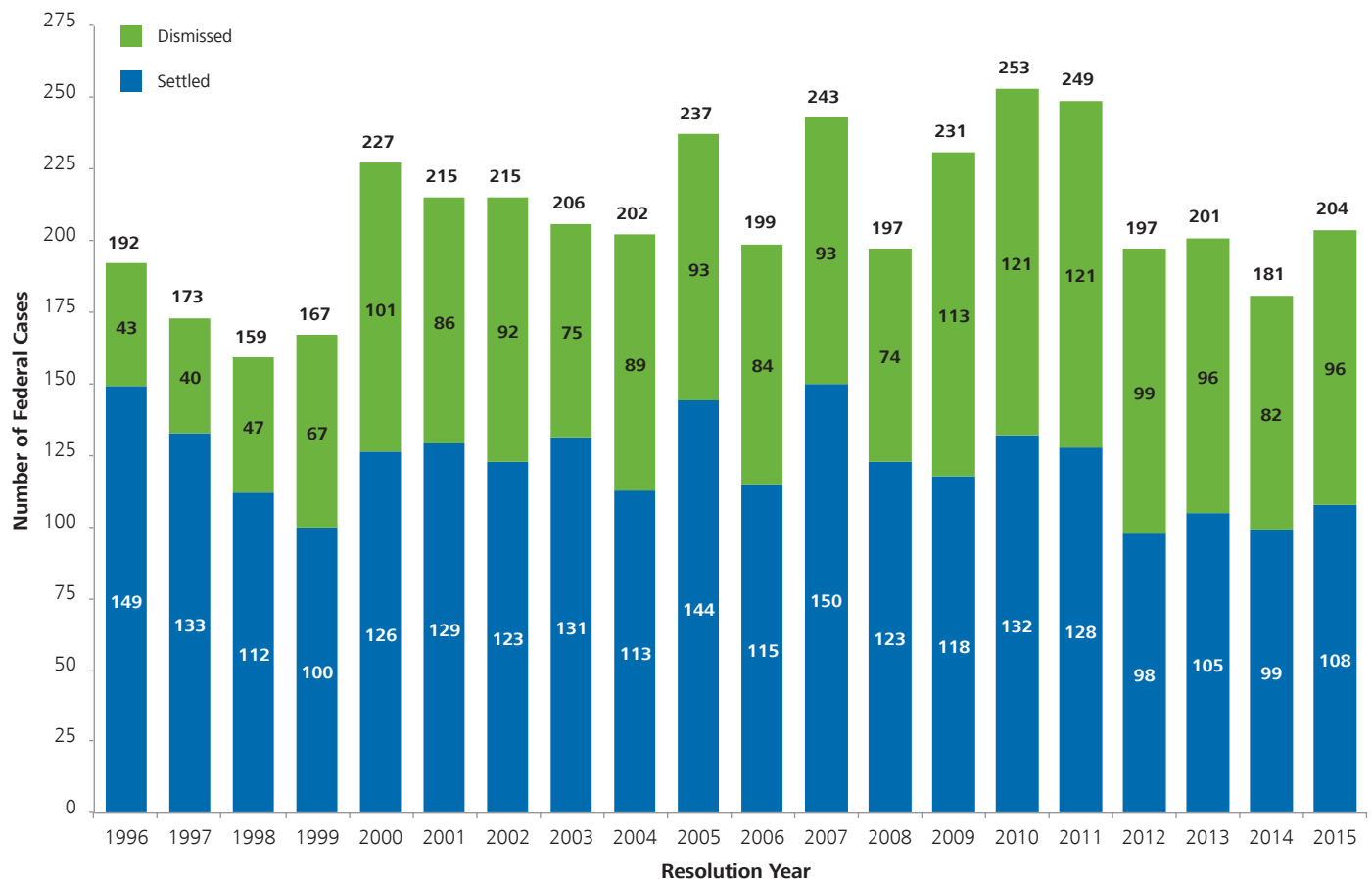
Trends in Case Resolutions

Number of Cases Settled or Dismissed

A total of 108 securities class actions settled in 2015, which is near the post-PSLRA lows seen over the past four years. See Figure 19. Despite having the highest number of settlements since 2011, there were 15% fewer settlements in 2015 than in 2011. Dismissals of securities cases have also been relatively low since 2011, but have increased over the last year. Ninety-six securities class actions were dismissed in 2015.

As we discuss below, the slowdown in the number of resolutions is primarily due to a lengthening of the time to case resolution, as opposed to a decline in the number of filings.

Figure 19. **Number of Resolved Cases: Dismissed or Settled**
January 1996–December 2015



Note: Analysis excludes IPO laddering cases. Dismissals may include dismissals without prejudice and dismissals under appeal.

Case Status by Year

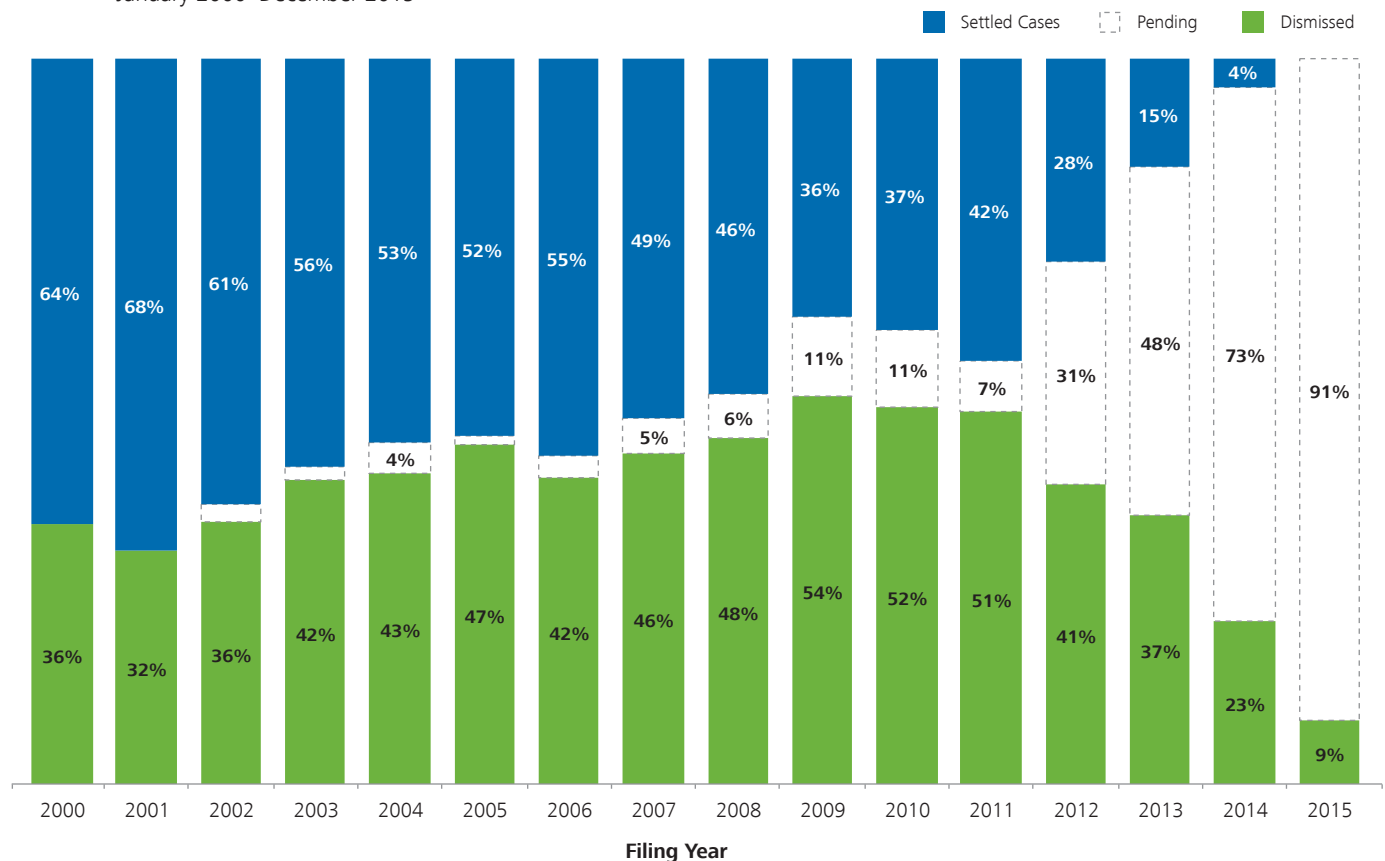
Figure 20 shows the rate of cases settled or dismissed, and the percent pending by filing year. These rates are calculated as the fraction of cases by current status out of all cases filed in a given year.

The rate of case dismissal has increased from around 35% for cases filed in 2000 through 2002 to around 42%-47% for cases filed in 2005 through 2007, and then to 51%-54% for cases filed in 2009 through 2011, when most of the credit crisis-related filings occurred. Nearly 90% of cases filed before 2012 have been resolved, providing evidence of longer-term trends about dismissal and settlement rates.

For more recent filings, we can look at the percent of cases that quickly resolve. We observe 9% of cases filed in 2015 were dismissed by the end of the year, in contrast to only 3% of cases filed and dismissed within calendar year 2014.¹⁴ Of these, the number of voluntary dismissals more than tripled from four in 2014 to 13 in 2015.

While dismissal rates have been on a rising trend since 2000 at least up to 2011, two opposing factors make us cautious about drawing conclusions or forecasting how more recent cases may be resolved: the large fraction of cases awaiting resolution among those filed in recent years, and the possibility that recent dismissals will be successfully appealed or re-filed.

Figure 20. **Status of Cases as Percentage of Federal Filings by Filing Year**
January 2000–December 2015



Note: Analysis excludes IPO laddering, merger objection cases, and verdicts. Dismissals may include dismissals without prejudice and dismissals under appeal.

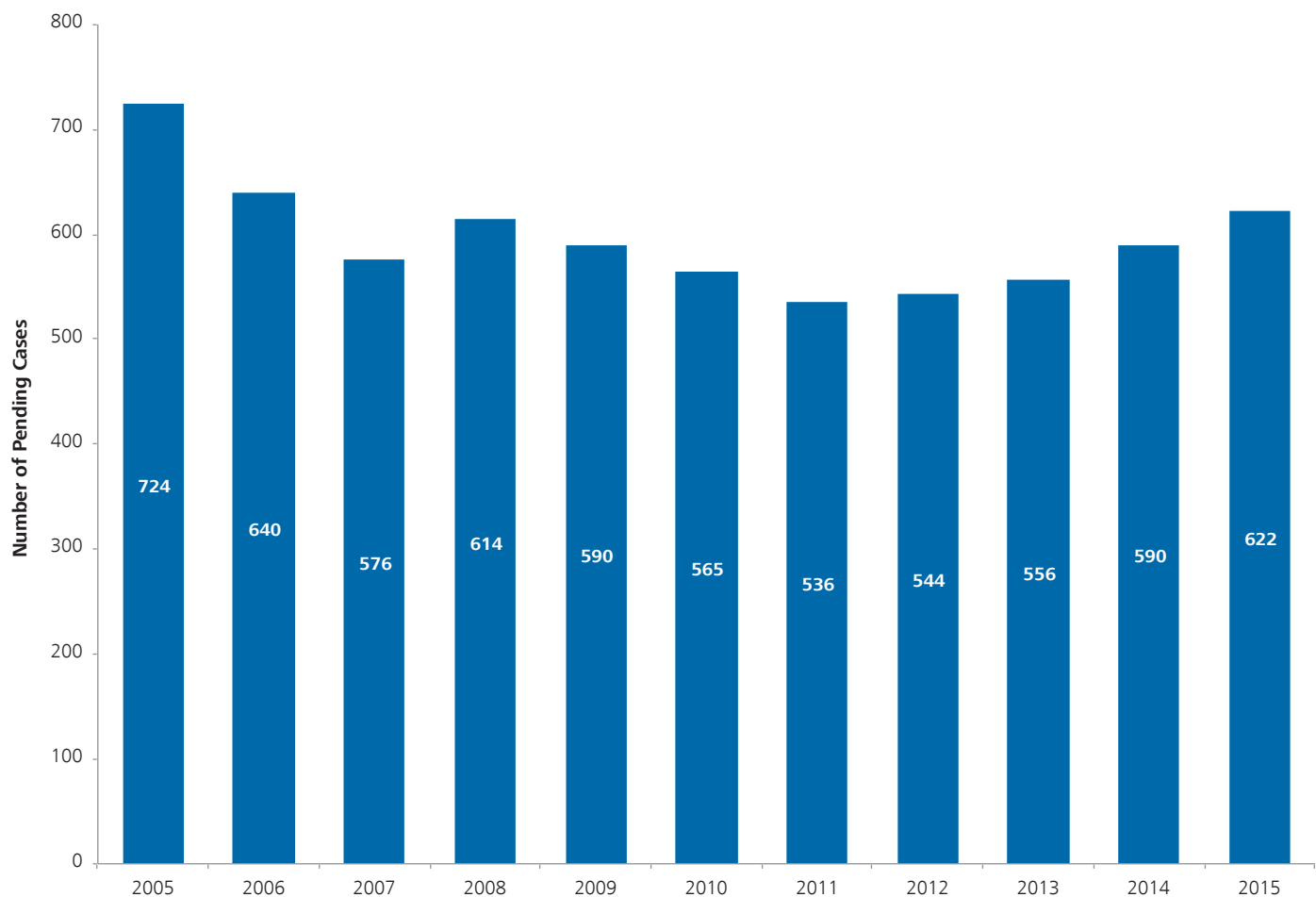
Number of Cases Pending

The number of securities class actions pending in the federal system decreased from 724 in 2005 to 536 in 2011. Since then, the number of pending cases has increased, reaching 622 in 2015, an increase of about 16% from the trough. See Figure 21.

Since cases are either pending or resolved, a decline in the number of filings or a lengthening of the time to case resolution also potentially contribute to changes in the number of cases pending. If the number of new filings is constant, the change in the number of pending cases can be indicative of whether times to case resolution are generally shortening or lengthening.

Given the relatively constant case filing rate until recently, the increase in pending cases since 2012 suggests that a slow-down of the resolution process over the period is the likely driver of the increase in pending claims.

Figure 21. **Number of Pending Federal Cases**
January 2005–December 2015



Note: The figure excludes, in each year, cases that had been filed more than eight years earlier. The figure also excludes IPO laddering cases.

Time to Resolution

The term “time to resolution” denotes the time between filing of the first complaint and resolution (whether settlement or dismissal). Figure 22 illustrates the time to resolution for all securities class actions filed between 2001 and 2011, and shows that almost 40% of cases are resolved within two years of initial filing, and about 60% are resolved within three years.¹⁵

After grouping cases by filing year, Figure 23 shows the time it takes for 50% of cases filed each year to resolve, i.e., the median time to resolution. Except for increases in the median time to resolution following the 2000 dot-com bubble and the 2008 financial crisis, there has been a long-term downward trend in the median time to resolution. Over the first five years after the PSLRA went into effect, median time to resolution varied between 2.3 and 2.8 years. Over the 2008–2013 period, median time to resolution varied between 2.1 and 2.5 years. Much of this decline is due to shorter times to case settlement, as opposed to a shortening of the time it takes for cases to be dismissed.

Figure 22. **Time from First Complaint Filing to Resolution**
Cases Filed January 2001–December 2011

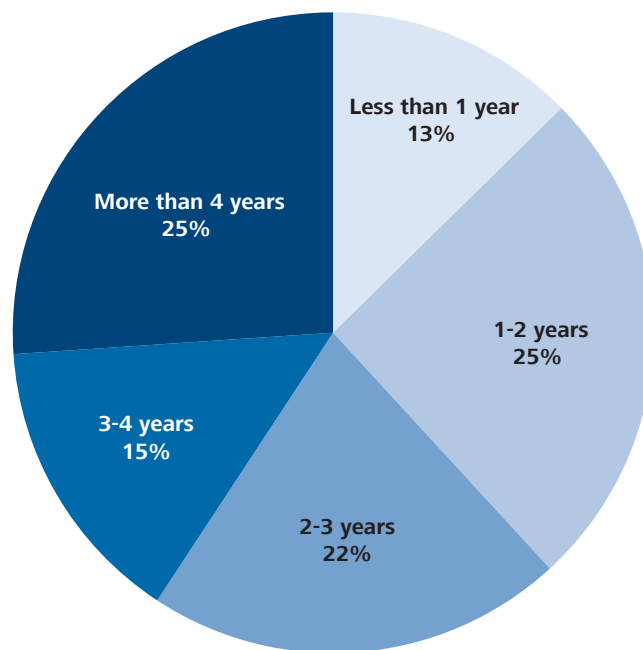
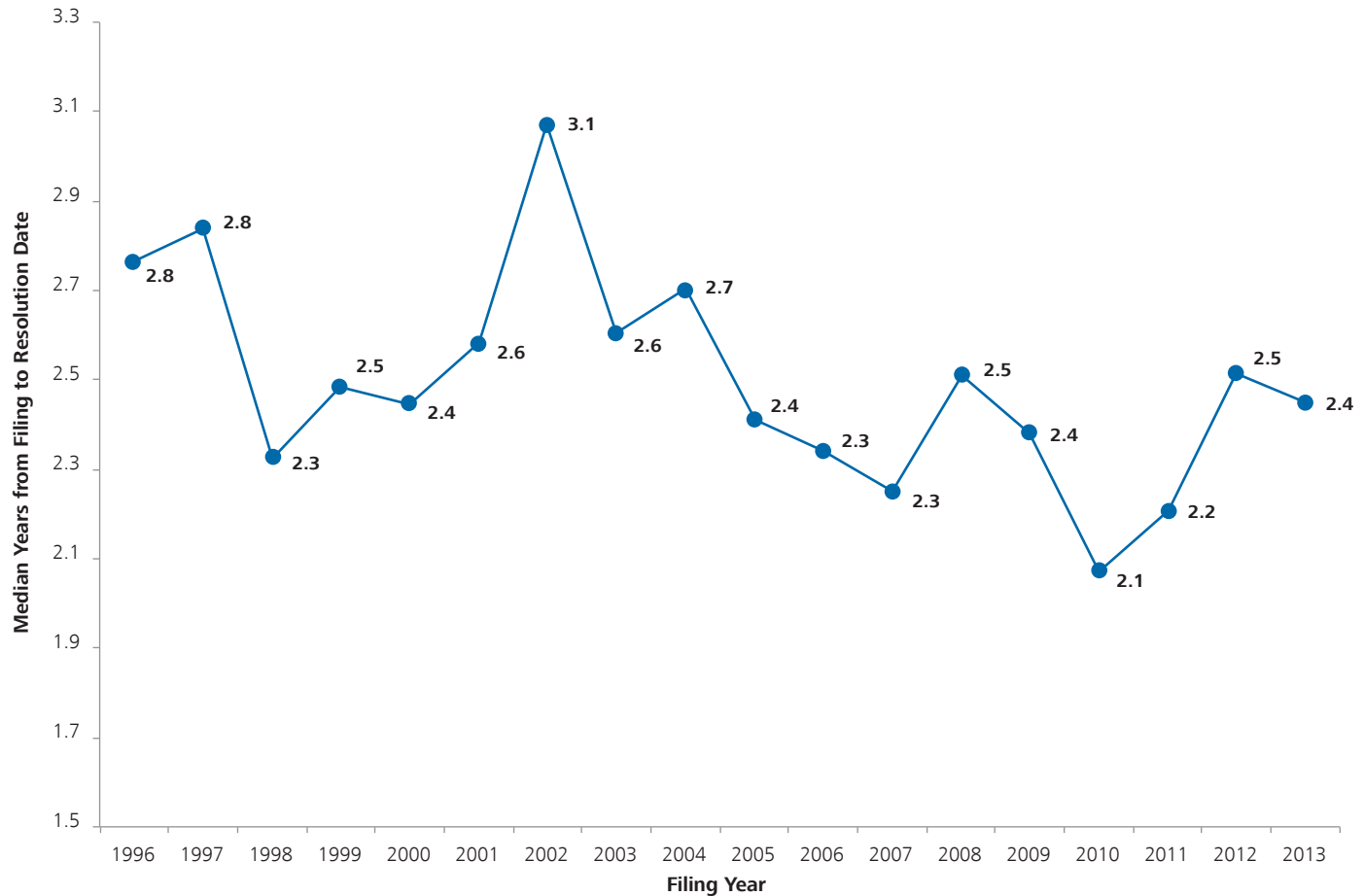


Figure 23. **Median Years from Filing of Complaint to Resolution of the Case**
Cases Filed January 1996–December 2013 and Resolved January 1996–December 2015



Trends in Settlements

We present several metrics regarding settlements in order to highlight attributes of cases that settled in 2015 and compare them with past years. We discuss two ways of measuring average settlement amounts and calculate the median settlement amount. Each calculation excludes IPO laddering cases, merger objection cases, and cases that settle with no cash payment to the class, as settlements of these less-usual cases may obscure trends in more typical cases.

The average settlement for 2015 reached \$52 million, an increase of more than 46% over 2014. Excluding cases that settled for more than \$1 billion dollars, the average settlement for 2015 was near the 2013 record high. The median 2015 settlement amount, which is more robust to extreme values, was \$7.3 million and little changed from 2014.

The settlement of a number of large cases in 2015 affected the average settlement statistics. To illustrate how many cases settled over various ranges in 2015 versus past years, we provide a distribution of settlements over the past five years. To supplement this, we tabulate the 10 largest settlements of the year.

Average and Median Settlements

Average settlement amounts rebounded in 2015 and exceeded \$52 million, an increase of 46% over 2014. See Figure 24. Excluding settlements that exceed \$1 billion to remove extreme outliers, this approaches the record high of \$54 million reached in 2013.

Figure 24. **Average Settlement Value (\$Million)—Excluding Settlements over \$1 Billion and Excluding IPO Laddering, Merger Objections, and Settlements for \$0 to the Class**
January 1996–December 2015

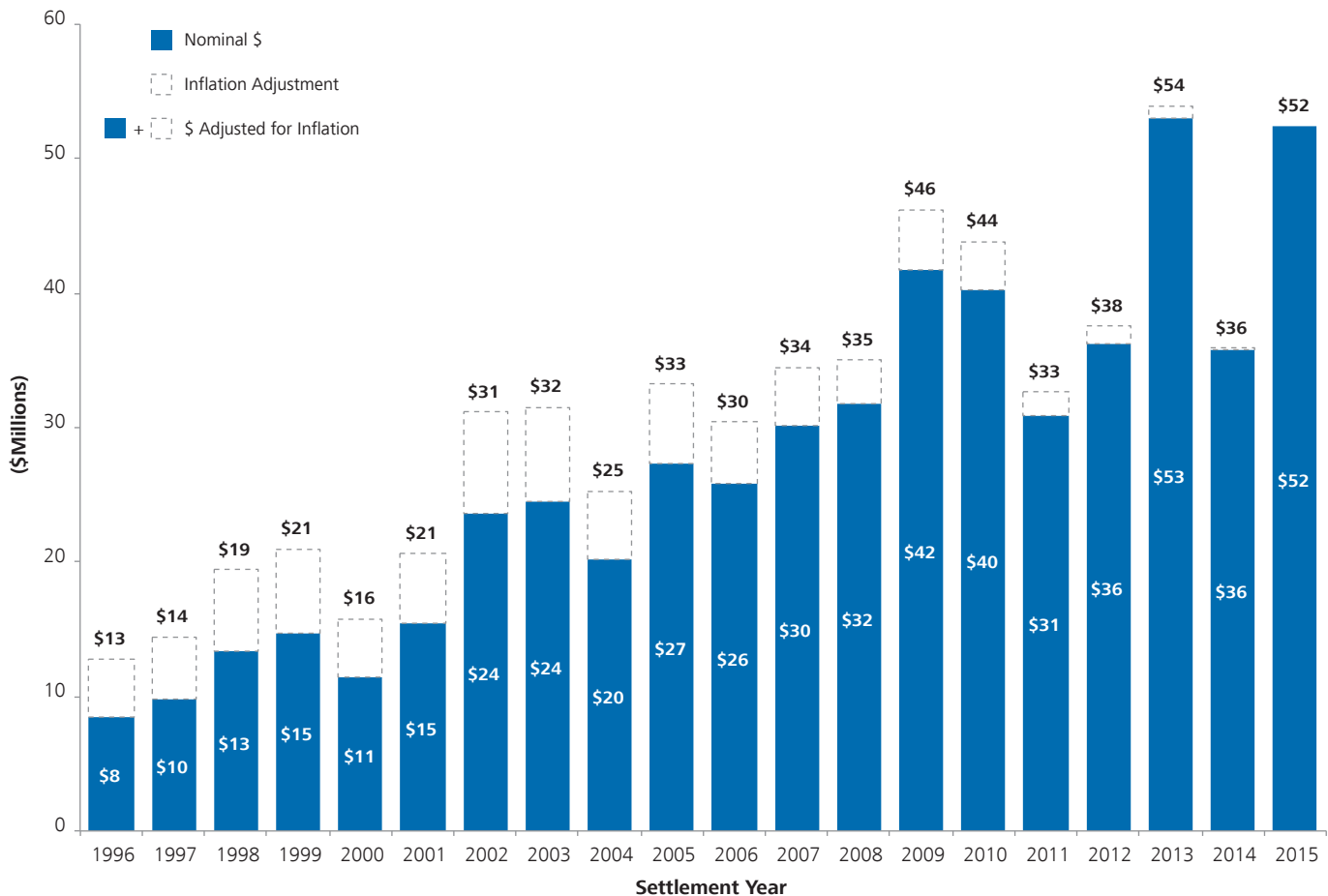
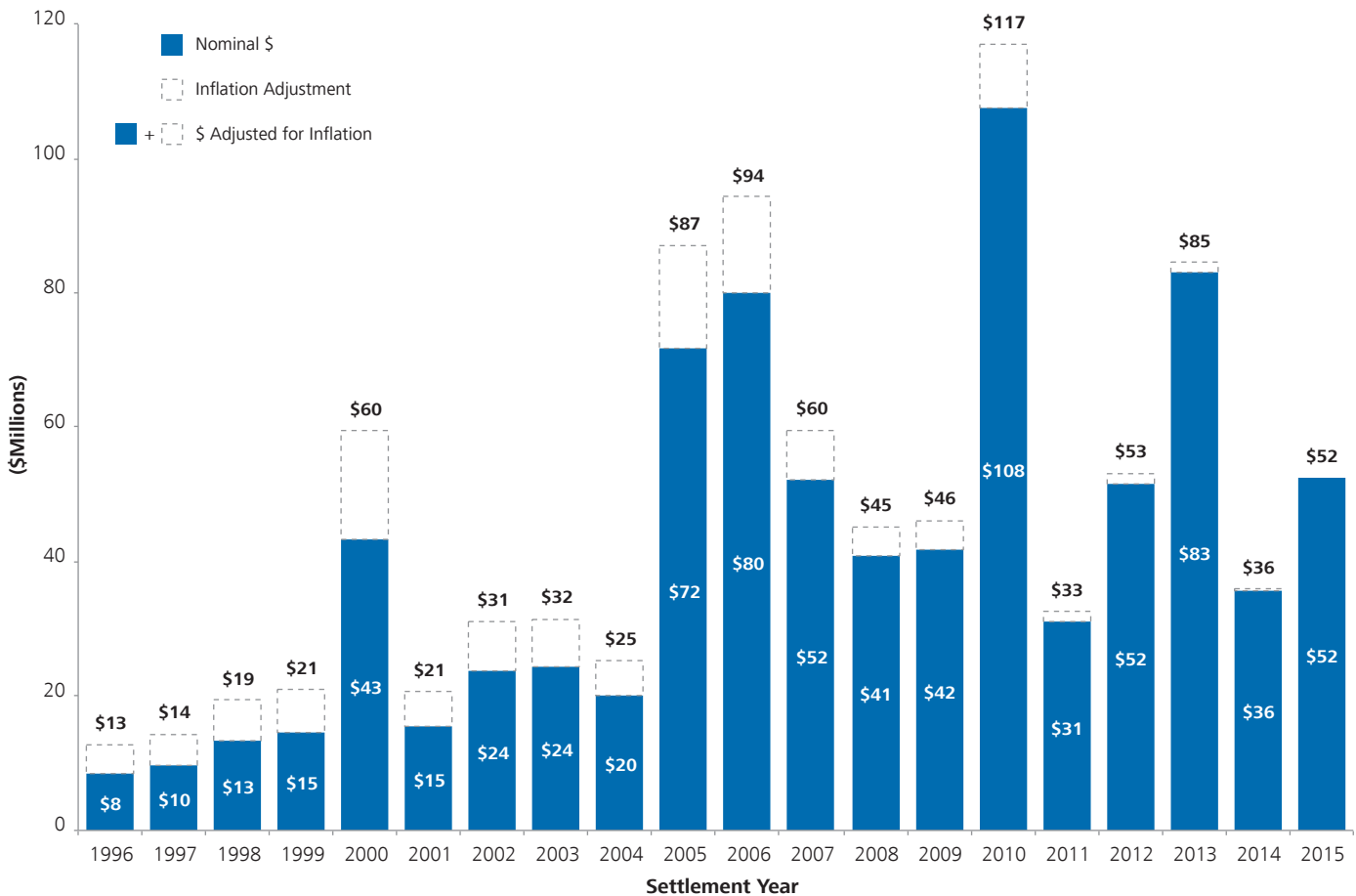


Figure 25 includes settlement amounts above \$1 billion. In 2013, one settlement exceeding \$1 billion was approved and pushed the overall average settlement amount to nearly \$83 million. Over the past two years, on the other hand, no case settled for above \$1 billion, so the average yearly settlement amounts for 2014 and 2015 are the same in both Figures.

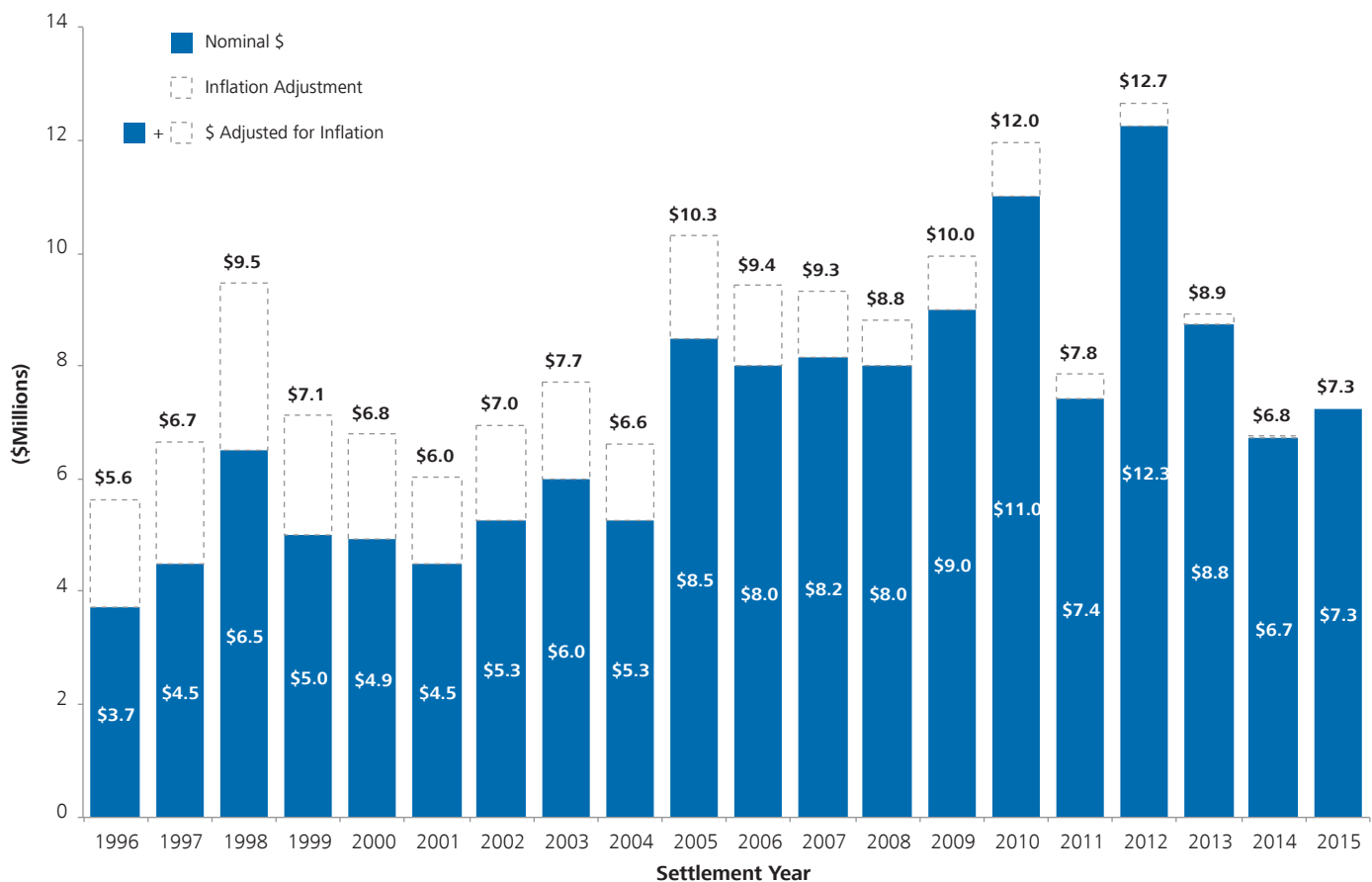
Figure 25. **Average Settlement Value (\$Million)—Excluding IPO Laddering, Merger Objections, and Settlements for \$0 to the Class**
January 1996–December 2015



The high 2015 average settlement amount was driven by multiple large settlements (each considerable, but less than the \$1 billion threshold). On the other hand, cases have not become more expensive to settle across the board, as shown by analyzing median settlements. The median settlement amount, or the amount that is larger than half of the settlement values over the year, is much closer to that of 2014 and other years over the past decade. In 2015, the median settlement amount was \$7.3 million, roughly equal to the 2014 median settlement. See Figure 26.

This year's average and median settlements reflect two different facets of settlement activity: a few large settlements drove the average up, while many small settlements kept the median stable.

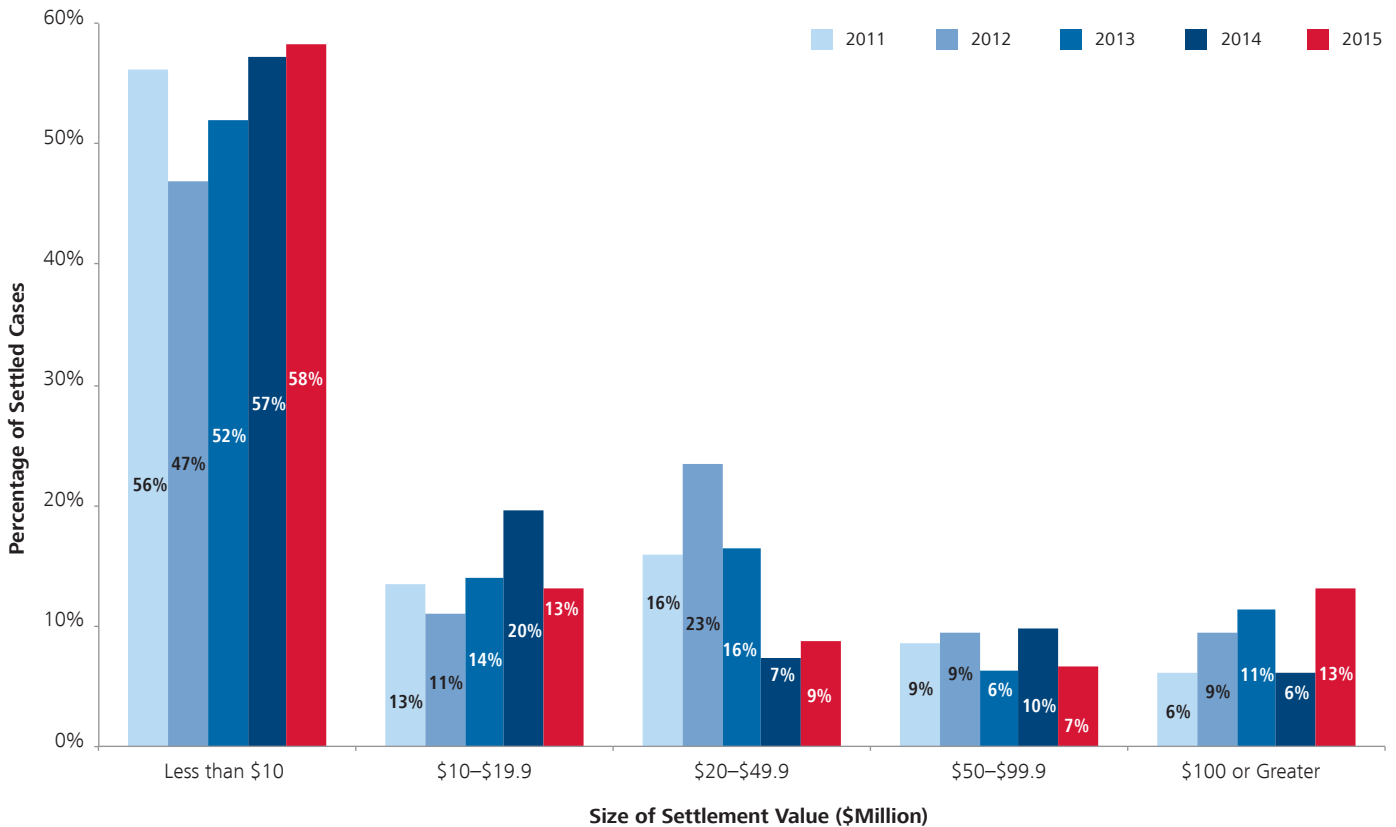
Figure 26. **Median Settlement Value (\$Million)—Excluding IPO Laddering, Merger Objections, and Settlements for \$0 to the Class**
January 1996–December 2015



Distribution of Settlement Amounts

The fraction of cases settled for less than \$10 million or more than \$100 million was larger in 2015 than in any year over the past five: 58% of the settlements were for amounts less than \$10 million while 13% were for amounts greater than \$100 million.¹⁶ See Figure 27. The fraction of cases that settled for amounts in each of the intermediate ranges was at or near the lowest levels over the past five years.

Figure 27. **Distribution of Settlement Values—Excluding Merger Objections and Settlements for \$0 to the Class**
January 2011–December 2015



The 10 Largest Settlements of Securities Class Actions of 2015

The 10 largest settlements of securities class actions in 2015 are shown in Table 1. Six out of the 10 largest settlements involved financial sector defendants and stemmed from litigation related to the financial crisis. These cases accounted for more than \$2.9 billion out of about \$5 billion in aggregate settlements (or about 60%) over the period. The largest, *American International Group, Inc.* (2008) (S.D.N.Y.), settled for \$970.5 million, making up nearly one-fifth of total settled litigation during the year. The largest settlements of 2015 are dwarfed by past settlements. *Enron Corp.* settled for more than \$7.2 billion in aggregate, while *Bank of America Corp.* settled for more than \$2.4 billion in 2013 and was the largest financial sector settlement ever, per Table 2.

Table 1. **Top 10 Securities Class Action Settlements of 2015** (As of December 31, 2015)

Ranking	Case Name	Total Settlement Value (\$MM)	Financial Institutions	Accounting Firms	Plaintiffs' Attorneys' Fees and Expenses	CC Related
			Value (\$MM)	Value (\$MM)	Value (\$MM)	
1	American International Group, Inc. (2008)	\$970.5	\$0.0	\$10.5	\$122.5	1
2	Bear Stearns Mortgage Pass-Through Certificates	\$500.0	n/a	No co-defendant	\$88.0	1
3	Pfizer, Inc. (2010)	\$400.0	No co-defendant	No co-defendant	\$102.3	0
4	J.P. Morgan Acceptance Corp. I (Mortgage Pass-Through Certificates) (2009)	\$388.0	No co-defendant	No co-defendant	\$101.9	1
5	IndyMac Mortgage Pass-Through Certificates	\$346.0	\$340.0	No co-defendant	\$45.0 ¹	1
6	RALI Mortgage (Asset-Backed Pass-Through Certificates)	\$335.0	\$235.0	No co-defendant	\$75.0	1
7	The Bank of New York Mellon Corporation	\$180.0	\$0	No co-defendant	\$48.0	0
8	Federal National Mortgage Association (Fannie Mae) (2008)	\$170.0	\$0	\$0	\$37.0	1
9	Duke Energy Corporation (2012) (W.D. N.C.)	\$146.3	No co-defendant	No co-defendant	\$35.9	0
10	Sprint Nextel Corporation (2009)	\$131.0	No co-defendant	No co-defendant	\$32.8	0
Total		\$3,566.8	\$575.0	\$10.5	\$688.2	0

¹ Does not include litigation expenses.

Table 2. **Top 10 Securities Class Action Settlements** (As of December 31, 2015)

Ranking	Case Name	Settlement Years	Total Settlement Value (\$MM)	Financial Institutions	Accounting Firms	Plaintiffs' Attorneys' Fees and Expenses
				Value (\$MM)	Value (\$MM)	Value (\$MM)
1	ENRON Corp.	2003-2010	\$7,242	\$6,903	\$73	\$798
2	WorldCom, Inc.	2004-2005	\$6,196	\$6,004	\$103	\$530
3	Cendant Corp.	2000	\$3,692	\$342	\$467	\$324
4	Tyco International, Ltd.	2007	\$3,200	No co-defendant	\$225	\$493
5	In re AOL Time Warner Inc.	2006	\$2,650	No co-defendant	\$100	\$151
6	Bank of America Corp.	2013	\$2,425	No co-defendant	No co-defendant	\$177
7	Nortel Networks (I)	2006	\$1,143	No co-defendant	\$0	\$94
8	Royal Ahold, NV	2006	\$1,100	\$0	\$0	\$170
9	Nortel Networks (II)	2006	\$1,074	No co-defendant	\$0	\$89
10	McKesson HBOC, Inc.	2006-2008	\$1,043	\$10	\$73	\$88
Total			\$29,764	\$13,259	\$1,040	\$2,913

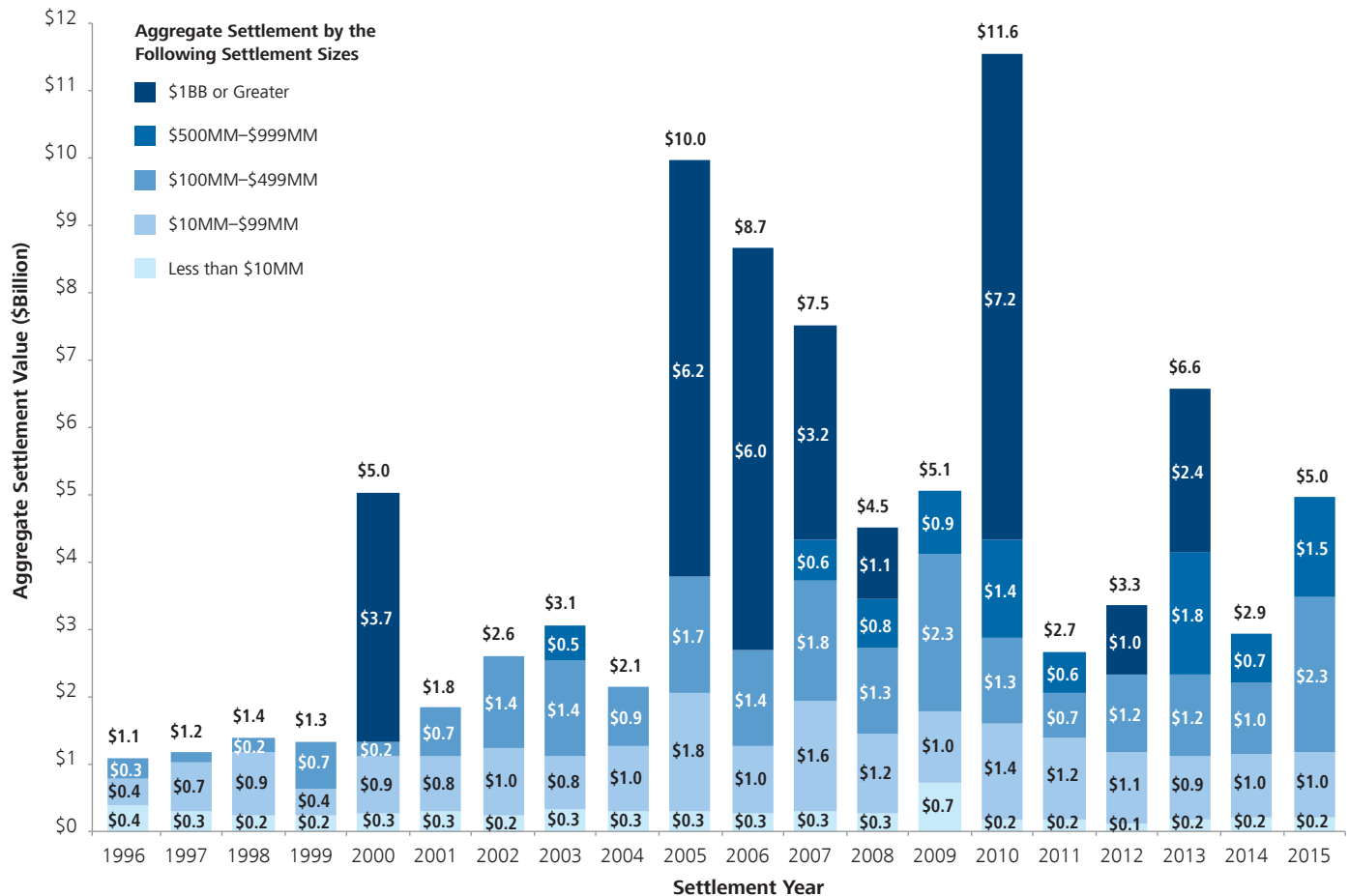
Aggregate Settlements

We use the term “aggregate settlements” to denote the total amount of money to be paid as settlement by (non-dismissed) defendants based on the court-approved settlements during a year.

Aggregate settlements were about \$5 billion in 2015, an increase from the \$2.9 billion approved in 2014 but well short of the \$6.6 billion in 2013, when multiple cases settled for more than \$1 billion. Especially notable in 2015 was the aggregate settlement amount attributable to cases that settled for less than \$1 billion, which approached the high seen in 2009.

Figure 28 reinforces the point noted above that much of the large fluctuation in aggregate settlements, especially since 2005, is driven by cases that settle for more than \$1 billion. In contrast, settlements under \$10 million, despite often accounting for the majority of settlements in a given year, account for a very small fraction of aggregate settlements.

Figure 28. **Aggregate Settlement Value (\$Billion) by Settlement Size**
January 1996–December 2015



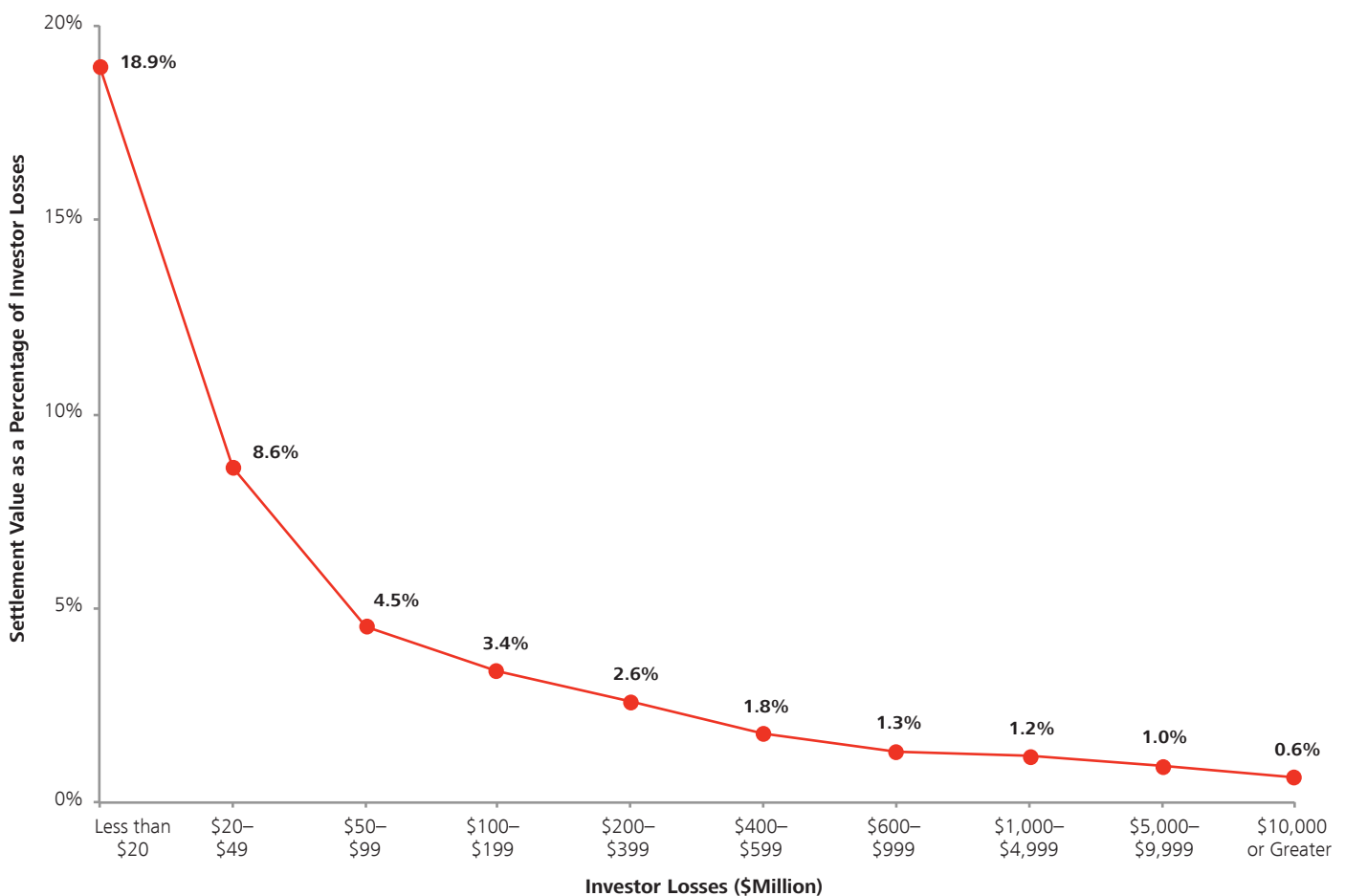
Investor Losses vs. Settlements

As noted above, our investor loss measure is a proxy for the aggregate amount that investors lost from buying the defendant's stock rather than investing in the broader market during the alleged class period.

In general, settlement size grows as investor losses grow, but the relation is not linear. Settlement size grows less than proportionately with investor losses, based on analysis of data from 1996 to 2015. Small cases typically settle for a higher fraction of investor losses (i.e., more cents on the dollar) than larger cases. For example, the median ratio of settlement to investor losses was 18.9% for cases with investor losses of less than \$20 million, while it was 0.6% for cases with investor losses over \$10 billion. See Figure 29.

Our findings about the ratio of settlement amount to investor losses should not be interpreted as the share of damages recovered in settlement, but rather as the recovery compared to a rough measure of the "size" of the case.

Figure 29. **Median of Settlement Value as a Percentage of Investor Losses—Excludes Settlements for \$0 to the Class**
By Level of Investor Losses; January 1996–December 2015

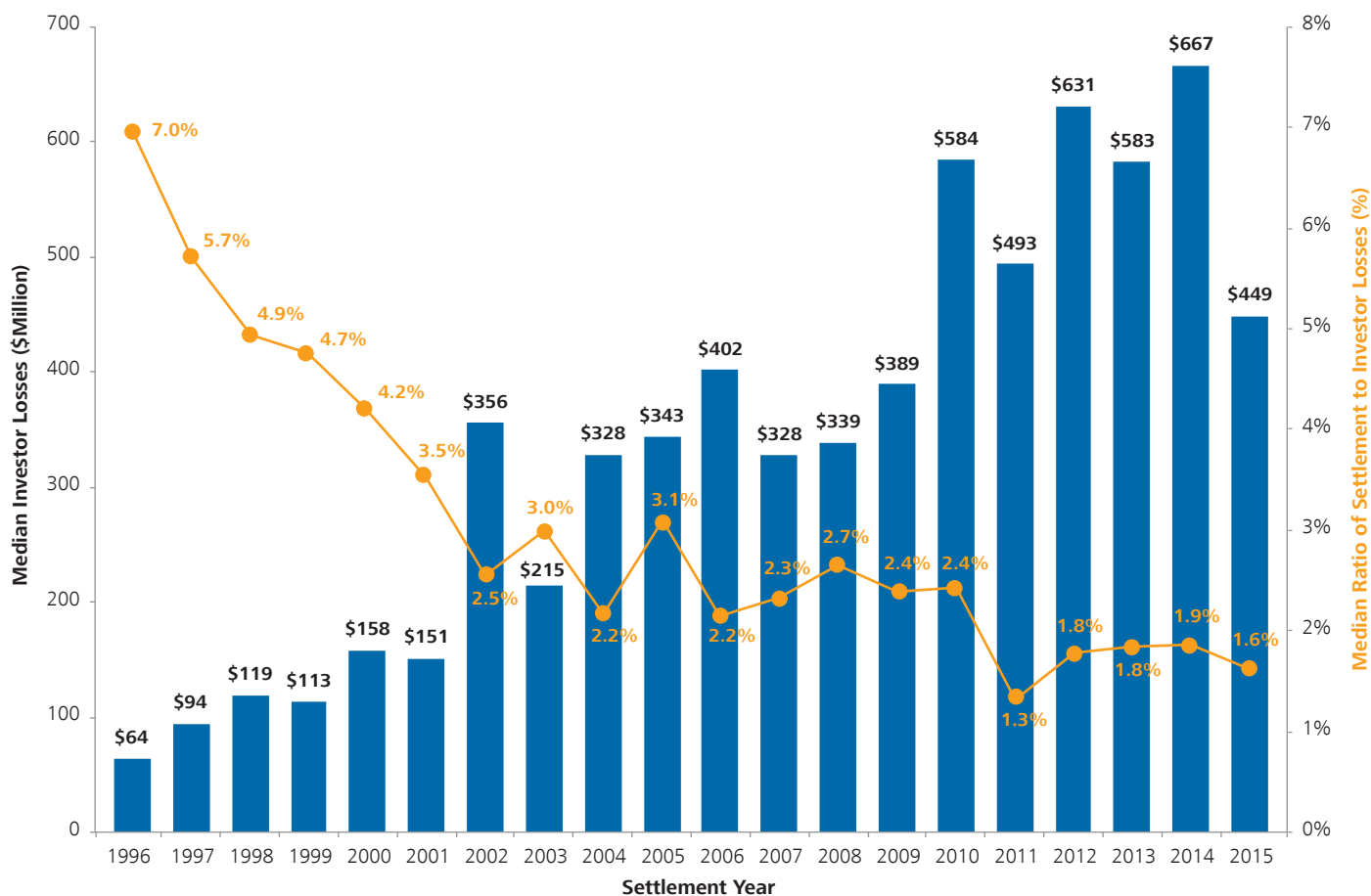


Median Investor Losses over Time

Median investor losses for settled cases have been on an upward trend since passage of the PSLRA. As described above, the median ratio of settlement size to investor losses generally decreases as investor losses increase. Over time, the increase in median investor losses has coincided with a decreasing trend in the median ratio of settlement to investor losses. Of course, there are year-to-year fluctuations.

As shown in Figure 30, the median ratio of settlements to investor losses was 1.9% in 2014. For the latter half of the year, after the *Halliburton II* decision, the median ratio was only 1.4%, suggesting that cases settled for less.¹⁷ This trend appears to have continued in 2015. The overall ratio was 1.6% in 2015, the second lowest percent in a decade, and coincided with a substantial decrease in median investor losses.

Figure 30. **Median Investor Losses and Median Ratio of Settlement to Investor Losses**
By Settlement Year; January 1996–December 2015



Explaining Settlement Amounts

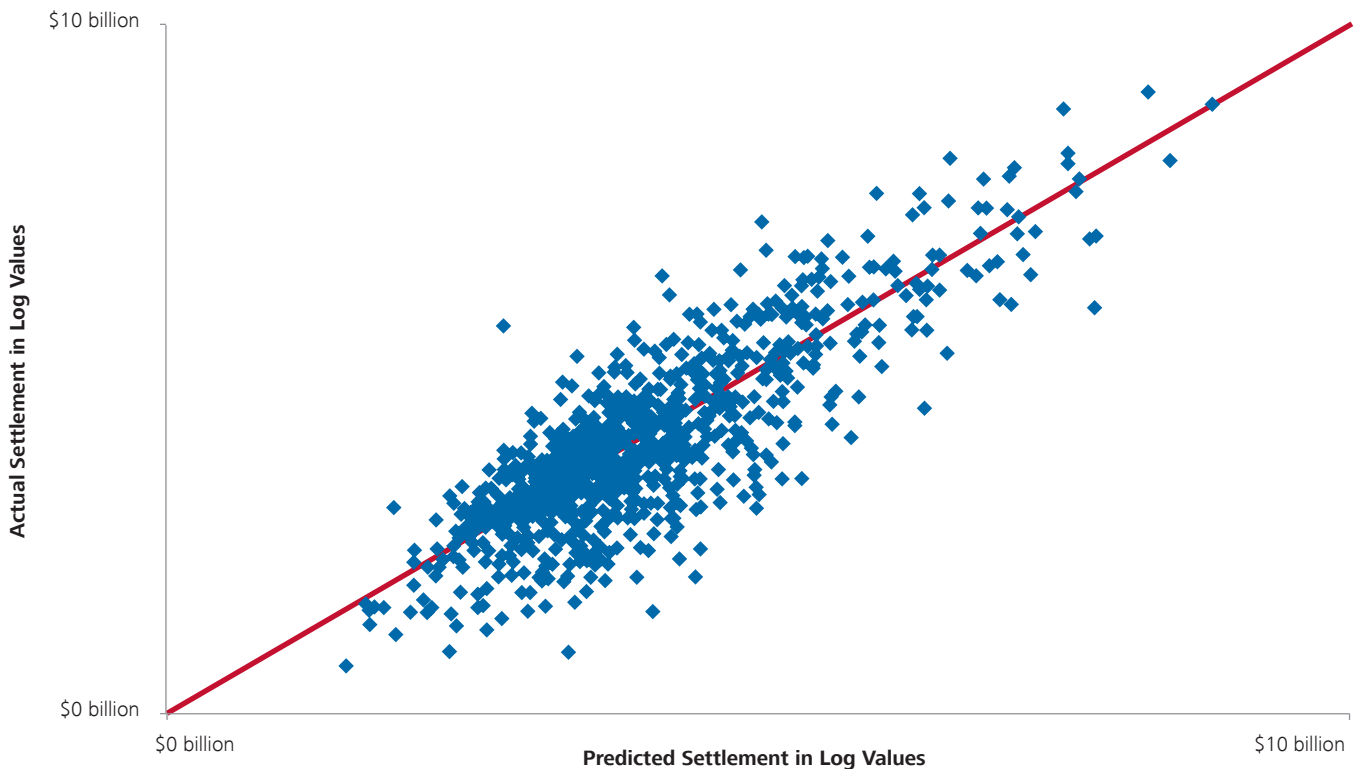
The historical relationship between case attributes and other case- and industry-specific factors can be used to measure the factors that are correlated with settlement amounts. NERA has examined settlements in over 1,000 securities class actions and identified key drivers of settlement amounts, many of which have been summarized in this report.

Generally, we find that the following factors have historically been significantly correlated with settlements:

- Investor losses (a proxy for the size of the case);
- The market capitalization of the issuer;
- Types of securities alleged to have been affected by the fraud;
- Variables that serve as a proxy for the “merit” of plaintiffs’ allegations (such as whether the company has already been sanctioned by a governmental or regulatory agency or paid a fine in connection with the allegations);
- Admitted accounting irregularities or restated financial statements;
- The existence of a parallel derivative litigation; and
- An institution or public pension fund as lead plaintiff.

Together, these characteristics and others explain most of the variation in settlement amounts, as illustrated in Figure 31. Note that the two largest settlements are excluded from this figure.

Figure 31. **Predicted vs. Actual Settlements**



Plaintiffs' Attorneys' Fees and Expenses

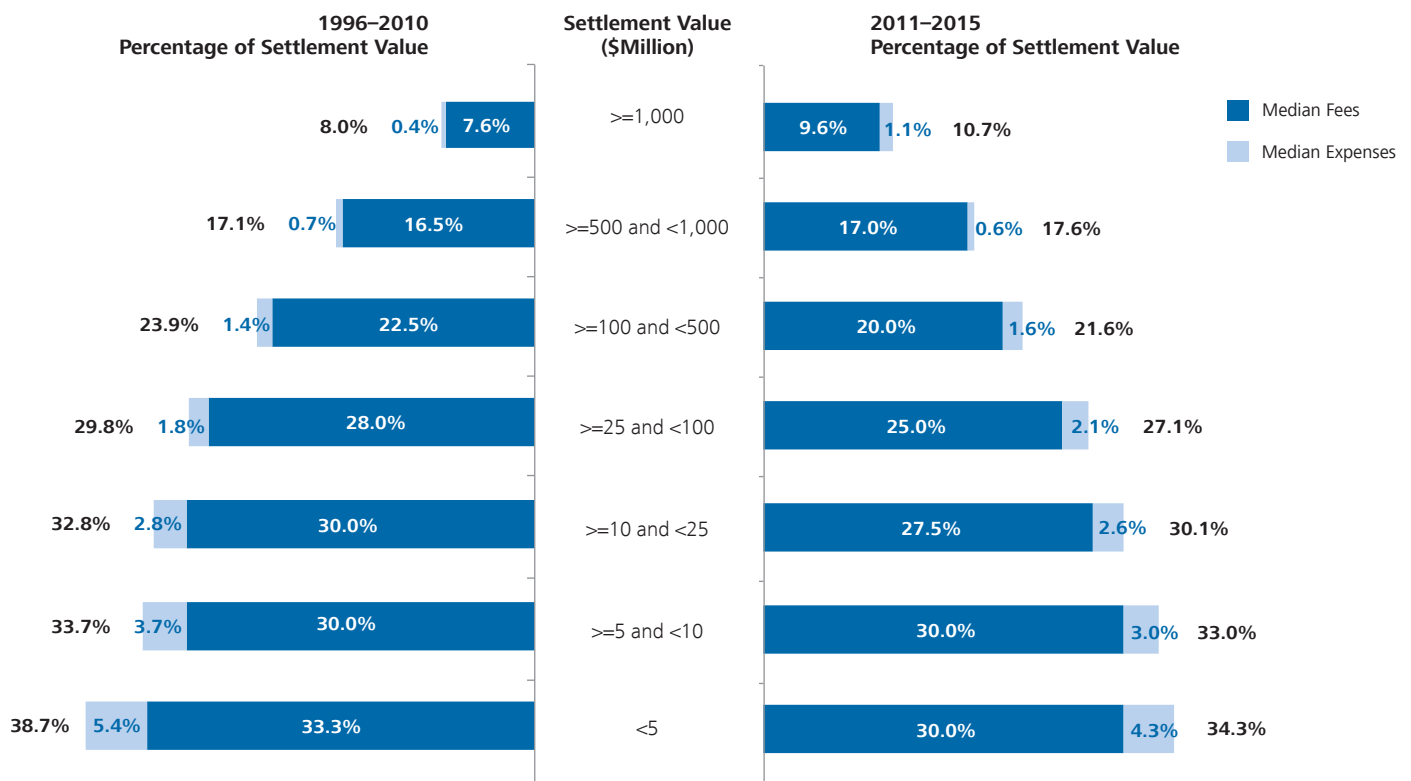
Usually, plaintiffs' attorneys' remuneration is determined as a fraction of any settlement amount in the forms of fees, plus expenses. Figure 32 depicts plaintiffs' attorneys' fees and expenses as a proportion of settlement values over ranges of settlement amounts. The data shown in this Figure exclude settlements for merger objection cases and cases with no cash payment to the class.

Two patterns are evident in Figure 32: (1) typically, fees grow with settlement size but less than proportionally (i.e., the fee percentage shrinks as the settlement size grows), and (2) fee percentages have been decreasing over time, except for fees awarded on very large settlements.

First, to illustrate that the fee percentage typically shrinks as settlement size grows, we grouped settlements by settlement value and report the median fee percentage for each group. While fees are stable at around 30% for settlements below \$10 million, they clearly decline with settlement size.

Second, to illustrate that fee percentages have been decreasing over time (except for very large settlements), we report our findings both for the period 1996-2010 and for the period 2011-2015. The comparison shows that fee percentages have decreased or remained constant for settlements under \$500 million. For settlements above \$500 million, fee rates have increased.

Figure 32. **Median of Plaintiffs' Attorneys' Fees and Expenses, by Size of Settlement—Excludes Merger Objections, and Settlements for \$0 to the Class**



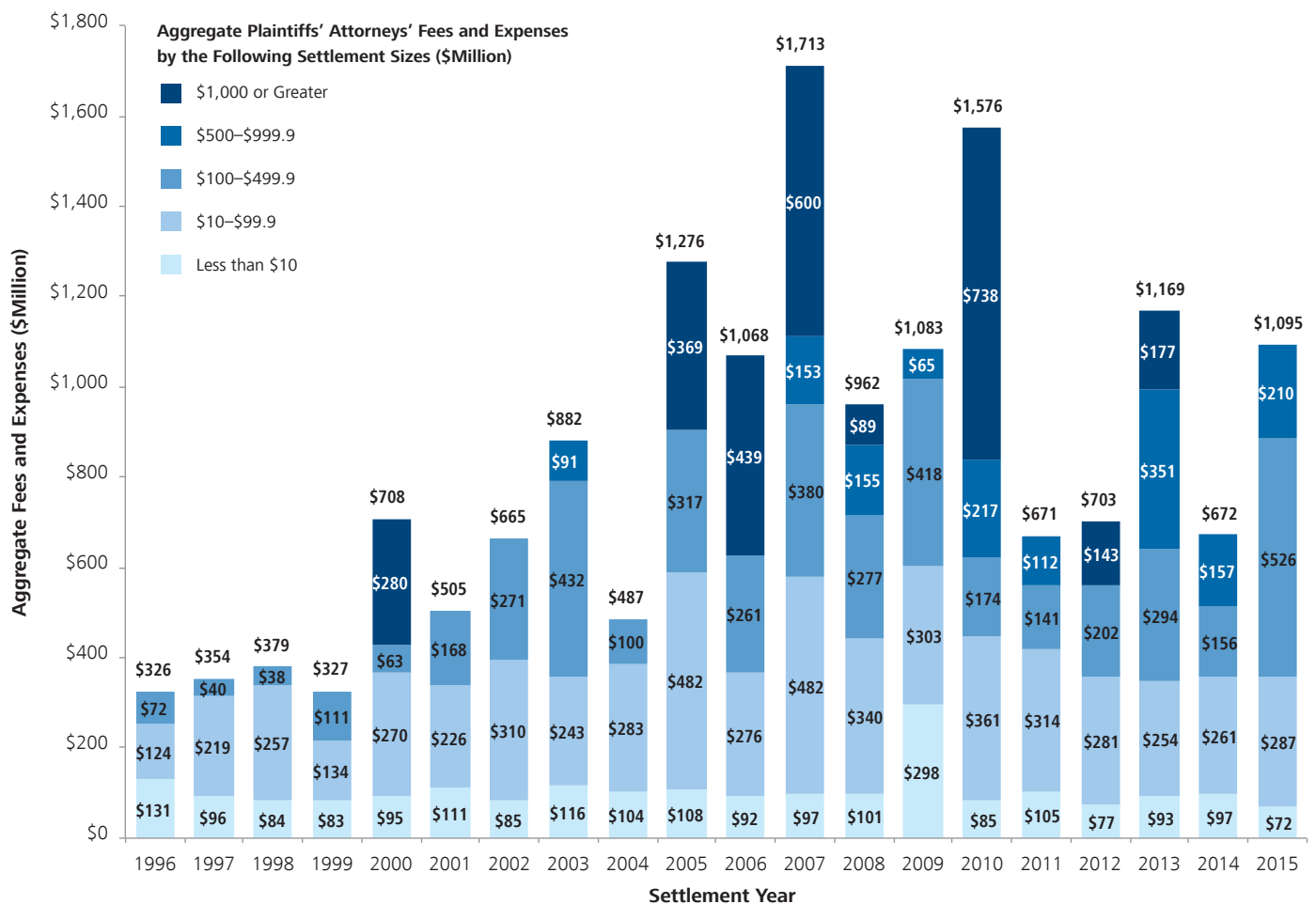
Aggregate Plaintiffs' Attorneys' Fees and Expenses

Aggregate plaintiffs' attorneys' fees and expenses are the sum of all fees and expenses received by plaintiffs' attorneys for all securities class actions that receive judicial approval in a given year.

In 2015, aggregate plaintiffs' attorneys' fees and expenses were \$1.095 billion, an increase of nearly 63% over 2014 and mirroring the increase in settlement amounts discussed earlier. See Figure 33. Settlements in 2015 generated the highest aggregate plaintiffs' fees and expenses for any year on record in which there were no settlements above \$1 billion. This stemmed in part from the highest fees on record from cases settling for between \$100 million and \$500 million.

Note that this Figure differs from the other Figures in this section, because it includes in the aggregate those fees and expenses that plaintiffs' attorneys received for settlements in which no cash payment was made to the class.

Figure 33. **Aggregate Plaintiffs' Attorneys' Fees and Expenses by Settlement Size**
January 1996–December 2015



Trials

Very few securities class actions reach the trial stage and even fewer reach a verdict. Table 3 summarizes the outcome for all federal securities class actions that went to trial among more than 4,300 that were filed since the PSLRA. Only 21 have gone to trial and only 15 have reached a verdict or a judgment.

No trials were held in 2015.

Table 3. **Post-PSLRA Securities Class Actions that Went to Trial** (As of December 31, 2015)

Case Name	Federal Circuit	File Year	Trial Start Year	Verdict	Appeal and Post-Trial Proceedings	
					Date of Last Decision	Outcome
Verdict or Judgment Reached						
In re Health Management, Inc. Securities Litigation	2	1996	1999	Verdict in favor of defendants	2000	Settled during appeal
Koppel, et al v. 4987 Corporation, et al	2	1996	2000	Verdict in favor of defendants	2002	Judgment of the District Court in favor of defendants was affirmed on appeal
In re JDS Uniphase Corporation Securities Litigation	9	2002	2007	Verdict in favor of defendants		
Joseph J Milkowski v. Thane Intl Inc, et al	9	2003	2005	Verdict in favor of defendants	2010	Judgment of the District Court in favor of defendants was affirmed on appeal
In re American Mutual Funds Fee Litigation	9	2004	2009	Judgment in favor of defendants	2011	Judgment of the District Court in favor of defendants was affirmed on appeal
Claghorn, et al v. EDSACO, Ltd., et al	9	1998	2002	Verdict in favor of plaintiffs	2002	Settled after verdict
In re Real Estate Associates Limited Partnership Litigation	9	1998	2002	Verdict in favor of plaintiffs	2003	Settled during appeal
In re Homestore.com, Inc. Securities Litigation	9	2001	2011	Verdict in favor of plaintiffs		
In re Apollo Group, Inc. Securities Litigation	9	2004	2007	Verdict in favor of plaintiffs	2012	Judgment of the District Court in favor of defendants was overturned and jury verdict reinstated on appeal; case settled thereafter
In re BankAtlantic Bancorp, Inc. Securities Litigation	11	2007	2010	Verdict in favor of plaintiffs	2012	Judgment of the District Court in favor of defendants was affirmed on appeal
In re Longtop Financial Technologies Securities Litigation	2	2011	2014	Verdict in favor of plaintiffs		
In re Clarent Corporation Securities Litigation	9	2001	2005	Mixed verdict		
In re Vivendi Universal, S.A. Securities Litigation	2	2002	2009	Mixed verdict		
Jaffe v. Household Intl Inc, et al	7	2002	2009	Mixed verdict		
In re Equisure, Inc. Sec, et al v., et al	8	1997	1998	Default judgment		
Settled with at Least Some Defendants before Verdict						
Goldberg, et al v. First Union National, et al	11	2000	2003	Settled before verdict		
In re AT&T Corporation Securities Litigation	3	2000	2004	Settled before verdict		
In re Safety Kleen, et al v. Bondholders Litigati, et al	4	2000	2005	Partially settled before verdict, default judgment		
White v. Heartland High-Yield, et al	7	2000	2005	Settled before verdict		
In re Globalstar Securities Litigation	2	2001	2005	Settled before verdict		
In re WorldCom, Inc. Securities Litigation	2	2002	2005	Settled before verdict		

Note: Data are from case dockets and news.

Notes

- ¹ This edition of NERA's research on recent trends in securities class action litigation expands on previous work by our colleagues Lucy P. Allen, the late Frederick C. Dunbar, Dr. Vinita M. Juneja, Dr. Denise Neumann Martin, Dr. Jordan Milev, Robert Patton, Dr. Stephanie Planchich, Dr. David Tabak, and others. The authors also thank Dr. Planchich and Dr. Tabak for helpful comments on this edition. In addition, we thank Shadman Torofder and other researchers in NERA's Securities and Finance Practice for their valuable assistance. These individuals receive credit for improving this paper; all errors and omissions are ours.
- ² Data for this report are collected from multiple sources, including Institutional Shareholder Services Inc., complaints, case dockets, Dow Jones Factiva, Bloomberg Finance L.P., FactSet Research Systems, Inc., SEC filings, and the public press.
- ³ A recent study has attributed the decline in listings between 1997 through 2012 to a low rate of new firm listings and a high rate of delisting, the latter of which is explained by an unusually high rate of public company acquisitions. "NBER Working Paper "The U.S. listing gap," by Craig Doidge, G. Andrew Karolyi, and René M. Stulz, NBER Working Paper No. 21181, May 2015.
- ⁴ Note that here we only consider merger objection cases as federal cases alleging violation of securities laws or cases that merely allege breach of fiduciary duty. Merger objection cases filed in state court, which can potentially be numerous, are not counted.
- ⁵ "2015 Becomes the Biggest M&A Year Ever," *The Wall Street Journal*, December 3, 2015.
- ⁶ Andrew Bolger, "Warning signs appear after bumper IPO year," *Financial Times*, 26 December 2014.
- ⁷ Number of IPOs on US exchanges, excluding ADRs, from Mergerstat through FactSet Research Systems, Inc.
- ⁸ For the purposes of this Figure, we considered only co-defendants listed in the first identified complaint. Based on past experience, accounting co-defendants were sometimes added to or excluded from later complaints.
- ⁹ *Janus Capital Group, Inc., et al. v. First Derivative Traders* — (Docket No. 09-525).
- ¹⁰ *Stoneridge Investment Partners v. Scientific-Atlanta, Inc.* — (Docket No. 06-43).
- ¹¹ An alternative possibility is that once detected, full disclosure is made earlier, turning what would have been a "partial disclosure" into a complete disclosure.
- ¹² "The SEC's Renewed Focus on Accounting Fraud, Insights and Implications for Auditors and Public Companies," *The CPA Journal*, February 2014.
- ¹³ "SEC's New Whistleblower Program Take Effect Today," US Securities and Exchange Commission, 21 August 2011.
- ¹⁴ NERA Working Paper, "Recent Trends in Securities Class Action Litigation: 2014 Full-Year Review; Settlement amounts plummet in 2014, but post-*Halliburton* // filings rebound," by Svetlana Starykh et al, 20 January 2015, at <http://www.nera.com/publications/archive/2015/recent-trends-in-securities-class-action-litigation--2014-full-y.html>.
- ¹⁵ Each of these analyses excludes IPO laddering cases and merger objection cases because the former usually take much longer to resolve and the latter usually much less time to resolve.
- ¹⁶ These settlements exclude those in merger objection cases and in cases that settled with no cash payment to the class.
- ¹⁷ NERA Working Paper "Recent Trends in Securities Class Action Litigation: 2014 Full-Year Review; Settlement amounts plummet in 2014, but post-*Halliburton* // filings rebound," by Svetlana Starykh et al, 20 January 2015, at <http://www.nera.com/publications/archive/2015/recent-trends-in-securities-class-action-litigation--2014-full-y.html>.

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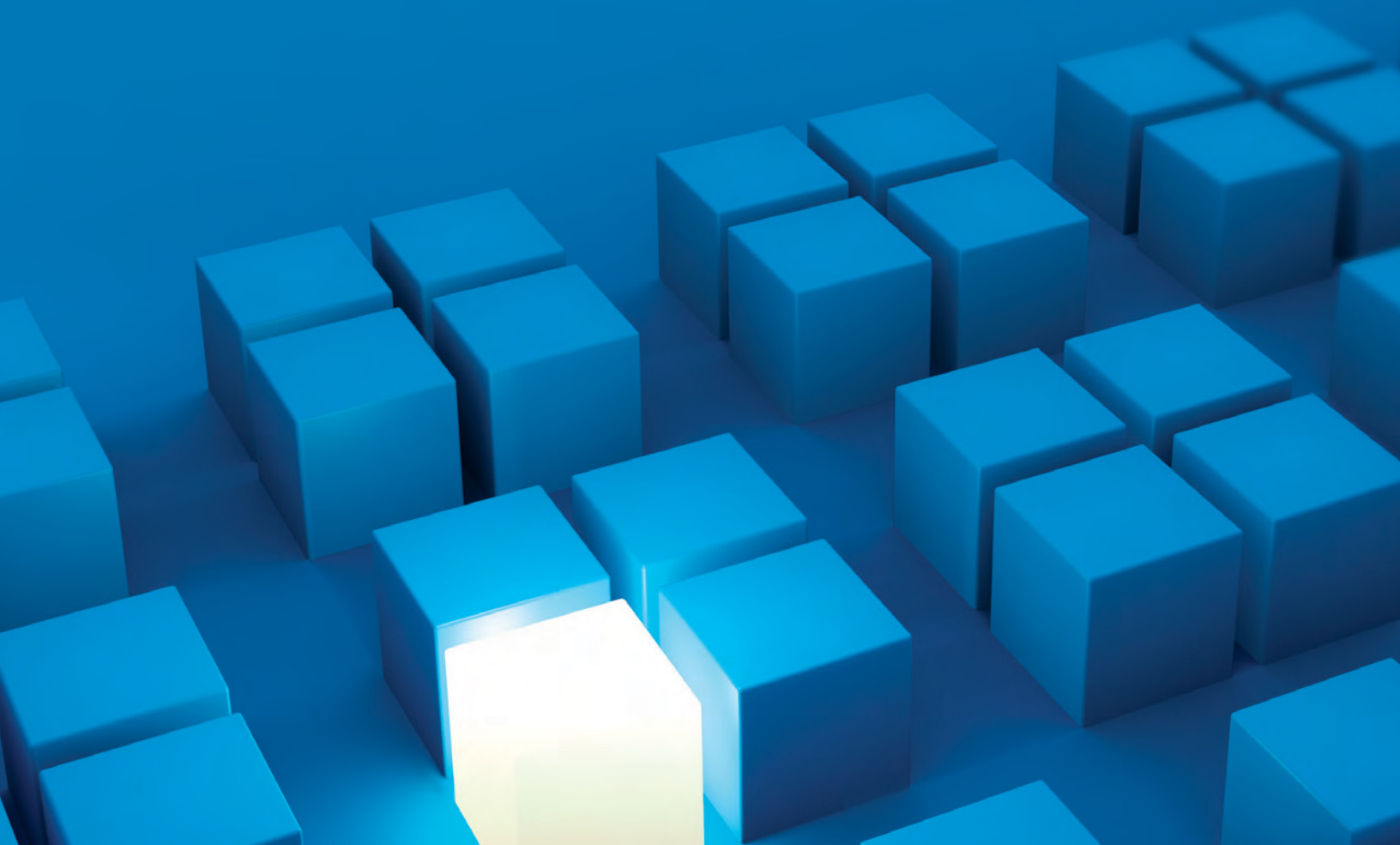
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A horizontal decorative bar consisting of three rectangular blocks of different shades of blue. The leftmost block is a medium blue and is the widest. The middle block is a darker blue and is narrower. The rightmost block is a lighter blue and is also narrower.

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